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Undergraduate Business and Management Students' Experiences of Being Involved in Assessment

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ABSTRACT

This study aimed to explore university undergraduates' experiences of student involvement in assessment (SIA). Based on Biggs' 3P model of student learning, this study focused on students' experiences prior to SIA, during SIA and after SIA in three Business and Management modules. Applying this framework, different practices of involving students in assessment (peer assessment, self assessment or self designed assessment) were studied from the perspectives of the students concerned. Unlike other studies that normally test to what extent the designed outcomes of SIA have been met, the goal of this research was to reveal the inside picture of how students were coping with those SIA tasks and their learning. This picture was outlined from students' perceptions of SIA, the main factors that might influence students' engagement with SIA, and students' reflections on SIA practice in the particular module.

This study adopted mixed research methods with sequential explorative design. It employed the ETLA (Environment of Teaching, Learning and Assessment) questionnaire and follow up semi-structured interviews. There were in total 251 valid questionnaire responses from students and 18 valid student interviews. The data were collected from three undergraduate Business and Management degree modules in which different strategies were used to involve students in assessment. The three innovative modules were all from Scottish universities in which assessment practices were being re-engineered by involving students in assessment. Two of the modules had participated in the REAP (Re-engineering Assessment Practice) project. However, they were different from each other in terms of the way in which they involved students in assessment and the level or extent of student involvement in assessment that was entailed.

The report and analysis of the findings has taken three main forms. First, the module context including the teaching, learning and assessment environment and student learning approaches and satisfactions in the particular module were compared and analysed using the questionnaire data. The results showed a strong association

between the elements in the teaching and learning environment and student learning approaches. They also indicated that the quality of teaching, feedback and learning support played significant roles in the quality of student learning. Secondly, an analysis of the interview data was undertaken to examine why and how students would learn differently in different module contexts with different SIA practices, and how students were coping with their learning in the SIA tasks concerned. In addressing these questions, students' previous experiences in SIA, and knowledge about SIA, peers' influence, teachers' support and training for SIA, interaction between and among students and teachers, the clarity of the module objectives and requirements and learning resources were found to be the major factors that might influence students' engagement in the SIA. Additionally, the salient learning benefits and challenges of SIA as perceived by students were explored. Thirdly, based on the preceding findings, the analysis of each module aimed to further consider in what way the three modules differed from each other with respect to SIA practices, and how students responded in the three different module contexts in terms of their engagement with SIA. These three forms of analysis made it possible to gain a rich understanding of students' experiences of SIA that could also feed into a consideration of what kind of support the students might need in order to better engage them into the SIA and better prepare them for life-long learning.

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With this work and my effort, I truly give my sincere and profound appreciation to my both supervisors, Professor Dai Hounsell and Dr. Velda McCune, who have been always encouraging and responsible all the way through my PhD journey. Dai engages his passion and expertise in supporting and guiding me in my researched area, especially he generously shares his research interests and reserch outcomes with me and other students. So does Velda who always tries her best to give me prompt and constructive feedback on my work in her busy schedule. What touched me most was their profound understanding of being an international student studying abroad and alone. Their effort not only made me confident in my research, but also enabled me gain a sense of belonging at this university community. All in all, my experiences here at the university of Edinburgh have been enhanced by what my supervisors did in these years.

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Finally if I could, I would like to give my appreciation to my examiners who will be the first readers of my work beyond my supervisors.

Declaration

I, Chunming Tai, hereby declare that this thesis was composed by myself and that this work is my own except where explicitly stated otherwise. I further declare that it has not been submitted for any other degree or professional qualification.

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CHAPTER 1 INTRODUCTION

1.1. Background to the Study

1.1.1. Rationale for this study

Teaching, learning and assessment are three inseparable parts in the student learning journey. There has been considerable evidence for the central role of assessment in student learning (Rowntree, 1987; Biggs, 1999; Leach et al., 2001). The search for a better assessment in practice has always been in the forefront of the efforts of researchers and practitioners. Nevertheless, understanding of what constitutes better assessment varies, depending on how one sees the role of the assessment itself in the educational process, as well as the role of the participant in the education and assessment processes (Van de Watering et al., 2008). In recent years, views on the role of assessment have been shifting from seeing assessment as a tool of testing learning outcomes towards seeing it a tool for learning, further to the culture of assessment as the part of the learning process. If we conceive of assessment for learning as a shift from summative to formative assessment, then assessment as learning is a shift from emphasizing the role of the teacher to emphasizing the role of the student.

In such a climate, increasingly new modes of assessment have been implemented, such as the prevalence of peer and self-assessment (Pope, 2001; Nicol, 2006; Falchikov, 2005; Boud 1995; Falchikov and Boud, 1989; Tan, 2007), a large amount of support for student self-designed assessment, and the use of learning contract and reflection. Some studies have shown that the new methods of assessment do indeed lead to significant learning gains: for example students' work seems to be of higher quality and more developed (Topping, 1998; Admiraal, and Pilot, 2006), but others have also raised challenges to such innovations. For example, student attitudes towards such assessment are not always positive. However, most discussions have been focused on the outcomes of such innovative practice in assessment, but the process of such practice and students' learning in such processes have not been fully

explored. Much evidence is solely based on one individual practice in one particular course, but there rarely is a study that compares those different types of student involvement in assessment across course modules and across subjects. This gap in the literature aroused my interest in different types of innovative assessment especially those practices with elements of student involvement.

My interests in assessment can be traced back to the year when I was studying for my Master degree in Scotland. As an international student studying in the UK system which was very different from the system in China where I was educated for the past 22 years, the first thing that struck me was the different ways of assessing students between those two systems. For the first time, I knew that there could be many other forms of assessment besides tests and exams. For the first time, I understood that the final assessment might not be the most important thing. Most importantly, I started to realise that the teacher was not necessary the only person who could mark or evaluate our work.

Before, like many others, I saw assessment as a tool to judge students' performance, and it belonged to the teacher and was thought to have nothing to do with myself except that I had to go through the exam system and complete it. However, everything in the new system here seemed to me to be different, and this prompted me to reflect on what other students thought about this. The question of what others would think about the different kinds of assessment was the original motivation for me to pursue my research interests in assessment. I picked up this topic for my previous Master dissertation which aimed to investigate what influence assessment could have on students' learning and why the assessment matters in the higher education learning for Chinese students. From doing this study, my understanding about assessment was extensively broadened. The concerns about assessment in my mind were extended to a much wider area and context. Initially, if someone was talking about assessment, I thought only about how I was assessed and judged by the teachers. However, in the study of my Master dissertation, people were talking about how they did exercises to test themselves, and how they tested each other while studying together in order to prepare for the teacher's assessment. I started to realize

that assessing someone's learning did not belong to the teacher exclusively, even in the context of Chinese universities years ago where the summative assessment was highly emphasized and centrally controlled. Before that, the stress, upset, disappointments, achievements and rewards were all that I could think about as far as assesmenet was concerned. In other words, my sight was limited to the results that assessment produced. However, during the study, I learned that there was so much I could look at, such as students' reflections on what kind of assessment suited them, what they really learned and enjoyed, what kind of interactions they experienced, what different experiences they had during the process of assessment.

Later, after the dissertation study, my eyes were enlightened by the concepts of 'self assessment' and 'peer assessment' in the literature that I came across. Looking back, I had been doing 'peer assessment' since I was in primary school when we were asked to recite the times tables to each other, and I had been doing 'self assessment' since I was in middle school preparing for my first important exams. My attention therefore was attracted by those new concepts. However, they seemed to be quite new when they appeared in the practice code. They were new because the idea of involving students in assessment behind them was new compared with the centralized assessment practice model. I started to focus on those practices in assessment with the element of involving students in the assessment process. I was curious to see how it might function when they were formally introduced in the university learning.

1.1.2. My perspectives on student involvement in assessment

Peer- and self-assessment have been mostly discussed when student involvement is considered. However, peer- or self-assessment is just one way of involving students in assessment and indicating their role as assessor. There could be many other ways of involving students in assessment other than this; for example, students could be involved at the early design stage of assessment, or they could be involved in giving feedback. There seems to be lack of clarification of the term 'student involvement' in

assessment. Some studies use it as ‘student engagement’, while others acquiesce in the narrow sense of peer or self-assessment. In this dissertation, the term is used to include any way of involving students in the decision-making about assessment. It differs from ‘student participation’ which indicates the behaviour of students as they tackle the particular assessment tasks. It also differs from ‘student engagement’ which emphasises a more affective aspect of students’ learning. My perspectives on student involvement are explored in more detail in the literature review chapter 2.4.

1.1.3. Feasibility of the study

As indicated in the title, my research was carried out in two Business and Management schools at two different universities. The reasons I chose the Business and Management schools as the research location include both methodological reasons and practical reasons.

First, as the aim of the present study is to understand students’ experiences of involvement in assessment, it is important to choose participants who have sufficiently rich experience of such practices. Therefore the first step is to locate my research in a context in which students are involved in decision-making in the assessment process. The vocational and practical side of the Business and Management curriculum provides a variety of choices in assessment strategies. The Business and Management programme was chosen as my research context, as I believed that there would be a wider range of assessment methods than in other disciplines and a better chance for me to find modules in which students were involved in assessment. Secondly, in the Business and Management programme, both more social science-oriented (soft-oriented) subjects (e.g. human resource management) and more scientific oriented (hard-oriented) subjects (e.g. accountancy) can be easily found. Lastly, the information on the current research sampling was mainly obtained from the REAP (Re-Engineering Assessment Practice) project in which more Business and Management modules are found to participate in assessment innovation compared with other subjects. Furthermore, with a good fortune and the assistance of my supervisor, I had personal contacts with

people who participated in the REAP project. Therefore, in practice it would be easier for me to gain access for the data collection.

One of the goals of the REAP project was to develop in students the ability to monitor, manage and self-direct their own learning (Nicol, 2007). A key assumption underpinning the REAP project was that if we wish to enable students to develop as self-regulating learners they must be given a more active role in assessment processes. The framework of the present study also suggested that carrying out assessment as a students' learning experience should equip students with life-long learning capacity. The goal of the REAP project therefore coincides with my theoretical frame of learning. Secondly, one of the 12 principles of good assessment and feedback in the REAP project is involving students in decision-making in assessment. Thirdly, modules participating in the REAP project have been evaluated by a range of methodologies, including focus groups (staff teams and students), sending questionnaires to students, analysis of exam results as well as changes in relation to REAP assessment principles (Nicol, 2007). However, the reports and evaluations are conducted both from the policy makers' and the teachers' perspectives. What kind of influences it brings to students and how students perceive the changes and their experiences are rather scarce.

For example, "Students generally reported positive reactions to these modes of assessment and learning, which give a focus for the development of lifelong learning skills. Also, most redesigns led to enhanced formative feedback on learning in first-year classes. The literature on retention shows positive effects from such interventions" (Nicol, 1997). In their project, in which a large number of students were and are participating so, there would be much rich data about students' perceptions of this distinctive experience. Therefore, it would be worthwhile to fill the research and evaluation gap based on this significant project, which gives me an excellent chance to look closely at what students have experienced and how they perceive these experiences in assessment.

1.2. Summary of the Study

1.2.1. Statement of the problem and development of the research questions

As described before, based on my original curiosity about my fellow students' thoughts on assessment, this research aims to explore how students perceive, experience and reflect upon the assessment practices with an element of student involvement from students' perspectives. Therefore the research questions are centered around three main foci. First, how students perceive student involvement in assessment is intended to show students' views and knowledge about student involvement in assessment. Secondly, how students experience this kind of assessment aims to explore how actually they went about their learning and what they actually did in this kind of assessment. Last research question is to let students reflect upon their experiences and to think what actually they have got out from such experiences. The specific research questions will be described in next chapter.

1.2.2. Research strategies and methods

Attracted by Tashakkori and Teddlie's (1998) strategies in research, I was informed that research concerning any substantive area of inquiry travels through a research cycle at least once. I followed the cycle they described in Figure 1.1 shown below. The process of my investigation could start from any point in the figure. For example, I might start from generating results from my observed facts or evidence through inductive reasoning (as shown in process a); or I might test a particular generalization on question of assessment with regard to the SIA event by deductive reasoning (as shown in process b).

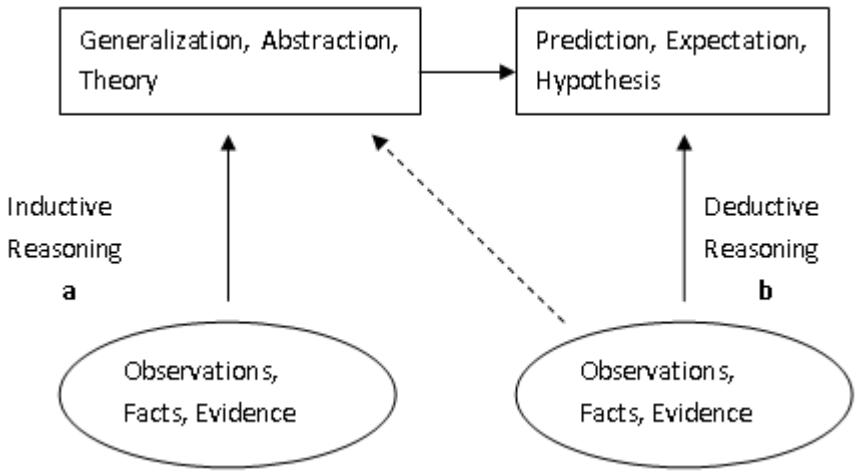

Figure 1. 1: The Inductive-Deductive Research Cycle

Source from Teddlie and Tashakkori and (1998: P25).

The present study involves both inductive and deductive research strategies to investigate the research questions. Inductive reasoning will allow me to make the best of my data to explore students' experiences and perceptions of being involved in assessment. The advantage of using both deductive and inductive reasoning is that they can together control the direction and focus of the research; at the same time, the richness of data would not be lost. Deductive reasoning provides the study with the theoretical foundation and scope of the research. Inductive strategy can prevent the study falling into only one theory's narrow lens, and can therefore maximize the richness of the analysis.

1.2.3. Overview of the study

Empirical evidence has been collected in both quantitative and qualitative ways in three undergraduate Business and Management courses in which different types of student involvement in assessment were required. The involvement in assessment that students were experiencing differed in both the level and the forms of involvement. The ETLQ (Experience of Teaching and Learning Questionnaire) inventory was adopted to get the broad picture of students' approaches to learning and perceptions of the teaching, learning and assessment environment in each course. Three modules in REAP project were studied, and a total of 255 students participated

in the questionnaire. Then semi-structured interviews were conducted with randomly-selected students who had filled in the questionnaire in each module. A total of 20 students participated in the follow-up interviews. It aims at exploring further the students' engagement with such involvement in their learning and how students perceive such experience in the round. The key findings of this study have been presented into an integrated and holistic way by the 3P model of student learning experiences of before, during, and after being involved in assessment process. The valuable implications are discussed by presenting identified factors that may significantly influence students' SIA. Reported challenges of such SIA perceived by students can also contribute to the educational design as well as teacher professional trainings.

1.3. Organizations of the thesis:

This thesis is organized and presented in a typical social science structure by which the whole research process and all the research findings could be presented in a logical way. It contains eight chapters in total.

Chapter 1 is the **introductory chapter**. The background of the study including the motivation behind my research interests in the topic and the choice of research context are introduced in this chapter firstly. It then continues with an explanation of the rationale and purpose of this study. Then the main scope of the investigation is outlined by an overview of the structure of the thesis and a brief introduction to the each chapter.

Chapter 2 Literature Review. A review of the existing studies on the assessment and student learning experience and how this research has been informed by the relevant literature make up the main content of Chapter 2. This chapter reviews firstly the cultures of assessment in different ages, and then mainly discusses previous studies researching into student involvement in assessment. Finally the role of assessment in student learning is briefly reviewed by discussing research into student learning.

Chapter 3: Research Design and Data Analysis. This chapter aims to describe the methodological choices and designs that have been involved in the current research investigation. It demonstrates the whole investigation process and justifies the decisions made in the research process. This chapter begins with an introduction of the research background including the current research aim and research questions. It also outlined the conceptual framework and the research context of the current study. Secondly, the mixed methods research design is explained. Thirdly, the specific methods and the process of data collection are described in detail. After that, the strategy and process of data analysis are illustrated. Lastly, a brief reflection on the research design is discussed with some methodological issues.

Chapter 4 Findings from the Quantitative Data. This chapter mainly presents the findings from the quantitative data set and analysis. Chapter 4 focuses on what came out of the inventory data analyses in order to set a general answer and a broad picture towards first two research questions of student perceptions of involvement in assessment and the main factors to influence their involvement in assessment. The inventory employed in the present study, a revised version of the Experiences of Teaching and Learning Questionnaire, contains three main parts. The first part concentrates on students' approaches to learning and studying; the second part of this questionnaire explores students' perceptions of the teaching learning and assessment environment of the module; and the third part looks at their overall satisfaction with the module studied with regards to aspects of teaching, learning and assessment. Specific analytical techniques and reasons for employing SPSS are explained, and the main findings from the analysis are presented.

Chapter 5 Qualitative Findings I: Thematic Findings. This chapter mainly reports the qualitative findings resulting from a thematic analysis of interview data. Based on the quantitative findings, this chapter aims to further explore reasons of students' perceptions of SIA, and to confirm factors that are commonly perceived influential to students' SIA. It presents the experiences of students who have had assessment in which a higher level of involvement is required. It starts with students' views on such

assessment compared with their experiences of more traditional assessment methods by which little or no involvement is demanded from them. Then in such a process, their engagement with such assessment is explored in order to make more sense of what the students were doing with their studies and how students learn in this particular teaching, learning and assessment environment. Finally, their perceived learning outcomes obtained or achieved in this module are presented.

Chapter 6, 7, and 8 are the second part of qualitative findings which present in-depth analysis of module A, B and C respectively. The three chapters offer a detailed insight into students' learning experiences in each context to reveal the answers to the last two research questions on how students engage with the SIA in different context and what they see themselves in such experiences. After the common themes of SIA that are derived from the thematic analysis are framed in chapter 5, more specific issues with self-assessment, peer-assessment, and self-designed assessment emerge from a more inductive analysis. Although the analysis of modules aims to discover more idiosyncratic issues, a number of more common themes reported in thematic findings are also evident in this chapter. All three module studies start with a detailed description of the module context. Their distinctive experiences are portrayed in the thematic structure of the 3P model (presage, process and product), but with a detailed and different focus based on different assessment strategies applied in the three modules.

Chapter 9 Discussions and Implications. This chapter brings all the reported findings together to discuss the most important and relevant issues for current higher education teaching, learning and assessment. It focuses on an evaluation of the findings with respect to the wider literature, so as to examine to what extent the findings from this study could contribute to the existing knowledge on student experience of assessment, especially with the student involvement element. Due to the strong contextual element of this study, the findings emerging from this research could potentially be beneficial for current assessment practice and module designs. Therefore, another important part of this chapter is the discussion of the practical implications of the main findings. The revised 3P model of assessment is also

discussed in depth together with the implications for assessment design and module organization. At last a reflection is made on the current research for future studies.

CHAPTER 2 LITERATURE REVIEW

2.1. Introduction to Assessment

Assessment has been and is always exciting considerable attention from the student, the teacher and other stakeholders such as the institutions, parents and employers. The central role of assessment in student learning has been highlighted by many researchers throughout recent decades. Boud (1988) suggested assessment methods and requirements probably have a greater influence on how and what students learn than any other single factor. Brown and Knight (1994) claimed strongly that assessment is at the heart of the undergraduate experience. Biggs and Tang (2007) also made it clear that what and how students learn depends to a major extent on how they think they will be assessed.

Aiming to explain what assessment is, Taras (2005) used Scriven's definition of assessment to describe 'assessment' as the judgments of the student's work. However, this definition tells only part of the story of assessment. 'Judgment' is the result of the assessment, but who makes the judgment, and how is this judgment made, and for what purposes are all part of the story of assessment which will be introduced in this section through five dimensions of assessment.

Assessment, in this research takes its definition from Erwin, as a:

> *Systematic basis for making inferences about the learning and development of students… the process of defining, selecting, designing, collecting, analyzing, interpreting and using information to increase students' learning and development.*
>
> (Erwin, 1991, P.15)

This definition covers the whole process of assessment and more importantly it declares the purpose of assessment as being: 'to increase students' learning and development'. This purpose is seen as the essence of assessment which is highlighted in this research. According to Rowntree, assessment in education can be thought of as one person having some kind of interaction with another person who is conscious

of obtaining and interpreting information about the knowledge and understanding, or abilities and attitudes of that other person (Rowntree, 1977: p4). In this light, assessment is seen as a human encounter which is another fundamental belief of this research.

However, understanding of assessment varies, depending on how one sees the role of the assessment itself in the educational process, as well as the role of the participant in the education and assessment processes (Van de Watering et al., 2008). In recent years, views on the role of assessment have been shifting firstly from seeing assessment as a tool of measurement towards conceiving of it as a tool for assisting and developing learning, secondly towards the culture of assessment as learning process. This section firstly synthesizes the changing cultures of assessment at different times in the higher education context and explores the fundamental beliefs on which this research is based. Secondly the five main dimensions of assessment are briefly introduced in order to provide early guidance on how different assessment practices are studied in this research. Thirdly the development of student involvement in assessment, the main focus of this research is reviewed. Lastly research in student learning experiences is discussed.

2.2. The changing culture of assessment

2.2.1. Assessment of Learning

Traditionally assessment was viewed as measurement of learning solely to provide accountability to external public stakeholders who wished to compare and rank schools and children (Murphy, 1997; Meier, 1994). This was described by Biggs and Tang (1999) as a 'measurement model of assessment', and Serafini (2000) also referred to this as one of the assessment paradigms. In this model, neither teachers nor students could have any involvement in decision making about the assessment and curriculum (Serafini, 2000). This assessment model dominated from 19th century until the early 20th century when societies became interested in sorting people out for different skill needs.

The measurement model is based on the positivist view that knowledge as a commodity is transferrable and exists separately from the knower (Serafini, 2000). This disadvantage of this assessment culture for student learning has been pointed out by Biggs and Tang (1999). As this model emphasises competition rather than development, and it judges people rather than performance, students have no control of the assessment, so they become extremely vulnerable in this situation and can be easily discouraged by a 'bad' mark.

This perspective on assessment might have worked well in the past when declarative knowledge was required and selective purpose was the priority. However, with the development of society and education, this measurement model was no longer satisfying stakeholders' demands. The external stakeholder wanted more accurate information and varied sources to better evaluate students' performance. An alternative model arose which was called the standard model by Biggs and Tang (1999). This model was designed to assess the changes in performance as result of learning. The so-called standard model of assessment is quite similar to what Serafini identified as the 'assessment as procedure' paradigm which places emphasis on using different ways of assessment to obtain more accurate information about student performance. Unlike the previous model, the results of this assessment are reported in terms of how well an individual meets the criteria of learning that have been set (Biggs and Tang, 1999).

Nevertheless, the purpose of these two models is the same: to collect information on student performance in order to judge student learning. Thus, those two models of assessment can be categorized into 'assessment of learning' where the nature of the assessment is seen as a relatively mechanical process.

2.2.2. Assessment for Learning

There has been a renewal of interest in formative assessment in recent years. Important reviews of research such as that by Black and Wiliam (1998) identified

elements of good practice in formative assessment. In their major review of research findings, both quantitative and qualitative evidence from innovative methods of assessment show that formative assessment can lead to improvement in students' learning. Since then, there has been a substantial amount of work (Sadler, 1989; Taras, 2002, 2005) discussing the potential benefits of formative assessment for aiding learning. The notion of formative assessment for learning has ever since informed, evolved and pervaded higher education. This type of assessment usually uses formative assessment to support learning. The information from such formative assessment can be used for teachers and their students as feedback in assessing themselves and each other, and wishing to modify their teaching and learning (Black and Wiliam, 1998).

The OECD (Organization for Economic Cooperation and Development) also lent its support to formative assessment for learning: teachers using formative assessment approaches guide students toward development of their own learning to acquire skills that are increasingly necessary as knowledge quickly becomes outdated in the information society (OECD, 2005, p.22).

It is of some interest to note here the term "assessment for learning" being used synonymously with "formative assessment". However, a limitation of formative assessment in practice, like summative assessment, is that its focus is put on immediate outcomes, for example for a better achievement in a particular course. This learning outcome surely should be part of the objectives of curriculum. However, Boud (2000) has argued that this has the effect of ignoring an important, but wider part of the assessment agenda: how to aid students to become active players in managing their own learning, and necessarily, their own assessment beyond the end of the course. If done well, formative assessment is effective in the short term, but, other than in initiatives such as the encouragement of some forms of self and peer assessment, it does not necessarily engage with the challenges of learning for the longer term.

Other alternative perspectives on assessment such as 'sustainable assessment' by

contrast, proposed by Boud (2000), takes the view that assessment activities should not only address the immediate needs of certification or feedback to students on their current learning, but also contribute in some way to their prospective learning (Boud and Falchikov, 2006). Whatever those kinds of assessment are, whatever those alternative assessments focus on, the common characteristic is that they are searching for a new approach which can overcome the defects of assessment which is only for immediate learning outcomes. Another similarity among them is that all these ideas focus on assessment itself as a tool, a way and a process to learn. Alverno College faculty (2003) defines this notion as a 'multidimensional process of judging the individual in action' the aim of which is to create 'learning that lasts' as '*assessment as learning*'.

2.2.3. Assessment as Learning

The notion of assessment as learning or as enquiry is not a new idea in the literature. Birenbaum and Dochy (1996) advocate this idea and see assessment as a process rather than a product of individual progress. Lorna Earl (2003) has the same idea, and she believes that assessment is an integral part of the learning process rather the product of learning. She distinguishes this new concept from the notion of assessment for learning by which students are given cues to review their learning and move forward with feedback loops. For assessment as learning, the emphasis is on the role of personal monitoring and the challenging of ideas that are embedded in the learning process, fostered by teachers and students.

From the movements of changing assessment outlined above, it is easy to see that the purpose of assessments differs markedly across different contexts. Students become involved in the process through a wide range of alternative assessment devices and methods (Serafini, 2000). The shift of assessment requires greater involvement and engagement from students. Serafini also argued that it requires teachers to change their perceptions of their role. If we say assessment for learning is a shift from summative to formative assessment, then assessment as learning is a shift from emphasizing the role of the teacher to stressing the role of the student. In assessment

as learning, the traditional hierarchical relationship between the teacher and the learner has changed into a learner-centered and empowering relationship, so that students can be turned as much more active players in the assessment process than is implied by summative or formative assessment.

Besides Lynch, mentioned earlier, several others also advocate involving students in the assessment process. For example, Boud argued (2006) that being able to judge one's own or another's work is one of the lifelong skills which students need to grasp in higher education to equip them for their future. By involving students in the assessment process, this aim can be achieved. Hounsell (2003) also proposes the possibility of involving students in the feedback giving process, and adopting a more open and collaborative approach to assignments to resolve the problem of feedback. This issue will be fully discussed in the later section on student involvement in assessment in 2.4. Before that, the following section is explaining what aspects or dimensions of assessment could be more transparent to students.

2.3. Five key dimensions of assessment

The assessment as we are talking about it here is not only in the narrow focus on the teacher's judgment or examination as assessment is usually conceived, but instead considers a wider range of issues regarding assessment, including the criteria of assessment, methods of assessment, the purpose of assessment, the presentation and communication of assessment results, and the responsibilities of assessing. This section will define the five key dimensions of assessment (as represented in Table 2.1), as different assessment practices are studied based on the five dimensions in this research.

Table 2. 1: Five dimensions of assessment

Five dimensions	Terminologies	Examples
1. What to assess?	Assessment criteria	Functional knowledge; presentation skills;
2. How to assess?	Methods of assessment	Essay writings; oral presentations;
3. Why assess?	Purposes of assessment	Formative assessment to aid learning; summative assessment for selections;
4. Who assesses?	The responsibilities of assessment	The teacher as the assessor; the students as the assessees;
5. How to report?	Presentation and communication of assessment results	Grades; percentage marks; qualitative feedbacks; dialogues;

The first question students need to ask and know about assessment is what is being assessed. The answer to this first question is related to what is being learned. This is normally defined as learning objectives of a course or module. By objectives, it might be knowledge in a particular subject area, comprehensive understanding of specific idea, ability to use the knowledge in a particular situation, ability to analyse and reasoning, ability to synthesis ideas, or ability to judge and evaluate the value of ideas. In assessment, the learning objectives are requirements and standards expressed in the assessment criteria. In Biggs' constructive alignment, he emphasised the importance of the alignment between the assessment criteria and the learning objectives. However, Biggs (1997) found that often the expressed objectives were not assessed either because what is being assessed was not aligned with the learning objectives, or there was a lack of clarity on the assessment criteria.

There has been a voice to advocate making assessment criteria explicit and accessible to students, because students should know what they are trying to achieve rather than guessing the 'secret'. Students have been found to be more likely to achieve the required outcomes with overt knowledge of assessment criteria (Brown and Knight, 1994; Rust et al., 2005; Price and O'Donovan, 2006). In this research, it is believed enhancing communication and student involvement in assessment are two

effective ways of making assessment criteria better known and understood by students. For example, Machell and Basom (2003) have found in their study that the negotiation between the students and the teacher on the assessment criteria helped students to clarify what was expected and increased their ability to address and understand specific performance criteria.

The second dimension, how to assess student learning depends on what kinds of method the assessment task is taken, such as MCT, essay writing or open-ended questions. There are many different and countless types of assessment task designs in the higher education context. Hounsell and his colleagues have noticed the diversity over the years, and made a clear systematic picture of this diversity. Under his lead, the two-year project ASSHE (Assessment Strategies in Scottish Higher Education) has found that changes of all kinds in assessment practices not only in what was being assessed, but also in how students were assessed (Hounsell, et al., 1998). Among those different assessment methods, according to the assessment tasks, it can be categorized into four general kinds: assignment writings (including essays, project reports, and journals), presentations orally or by poster, examinations or tests, and portfolios (collection of evidence and materials of learning). However, with regard to the participants, there are group based assessment and individual assessment; while there are terminal and continuous assessment in terms of the time of assessment taking place. Some literature may include self- and peer assessment as methods of assessment, but this study sees them as two different strategies of involving students in assessments and will be both discussed in section 2.4.

The third dimension of assessment is the purpose of the assessment. In some literature, the purpose of assessment was referred to summative and formative assessment (Brown, Bull, and Pendlebury, 1997). There has been a substantial amount of discussion on the difference between formative and summative assessment. According to Black and Wiliam (1998) formative assessment is concerned with the short term collection and use of evidence for the guidance of learning, mainly in day to day classroom practice; summative assessment serves to inform an overall judgment of achievement, which may be needed for selection or

certification at the end of a module or a course. Some people also distinguish them by the time of the assessment taking place or by whether there is a mark derived or not. However, given the emerging academic ambivalence related to the differentiation of assessment, since formative assessment does not exist in isolation beyond summative function, the time and mark are not appropriate criteria to distinguish them.

In practice, the boundary between formative and summative assessment is not always clear-cut (Rowntree, 1977, Brown, Bull, and Pendlebury, 1997), and the distinction between the two is not to be seen in the methods of assessment. Subsequent work in the field (Taras, 2005; Harlen, 2005) has questioned what has come to be seen by some as an arbitrary distinction between 'formative' and 'summative assessment'. Nevertheless, Falchikov's (2005) map (as shown in Figure 2.2) on formative and summative assessment seems to offer a clear picture on the purposes of the two.

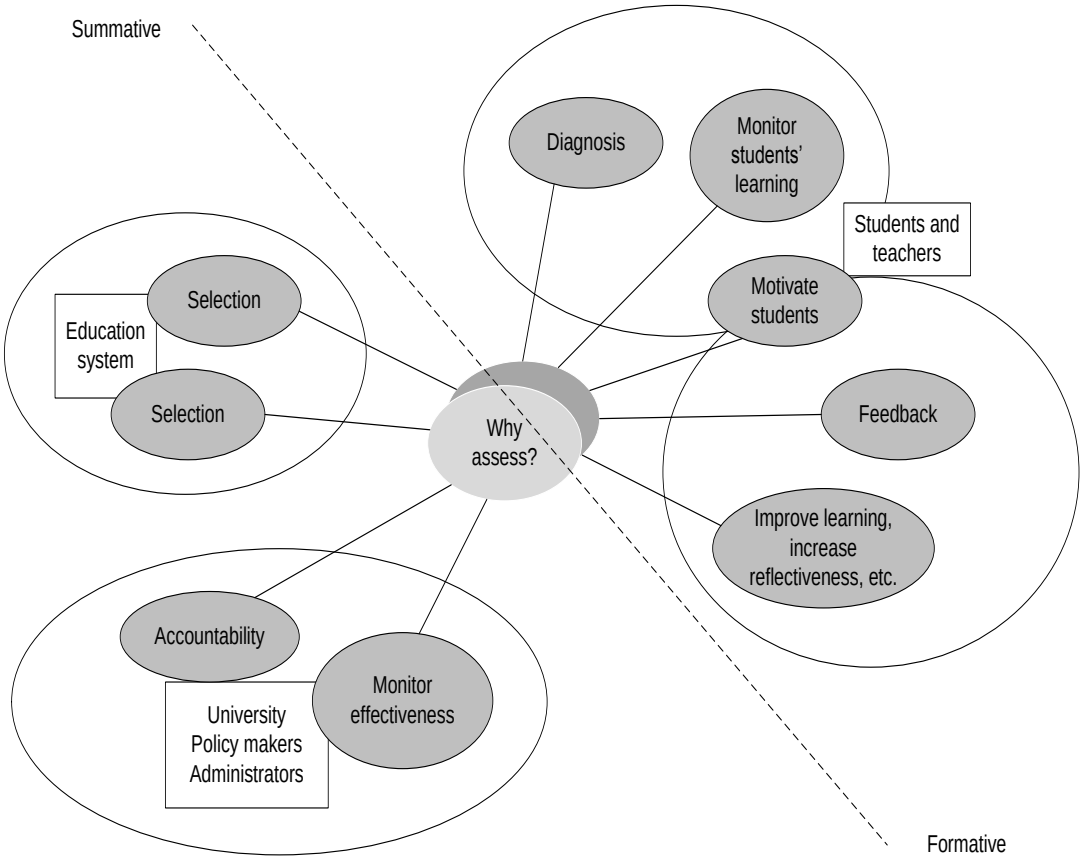

Figure 2. 1: The purposes of assessment (source from Falchikov, 2005: P5)

On the map, to the left are those summative purposes normally used by the upper level of educational management people, and to the right are the formative purposes mainly used by students and teachers for their learning and teaching. Sadler (1998) defines formative assessment as 'assessment that is specifically intended to provide feedback on performance to improve and accelerate learning' (P.77), which highlighted the centre theme of 'improving learning', in formative assessment. Therefore, in this research, who uses the results and information of assessment and whether it is for the purpose of improving student learning are used as the two main criteria to classify the formative and summative assessment.

The fourth dimension of assessment is looking at the responsibility of assessing. Who should do the assessing is normally regarded as who should do the marking. The answer to the question is not necessarily only the teacher or tutor, but also could be the student him- or herself, student peers, the employers, or even, in the ICT era, the computer. Therefore, who does the assessment is a rather important issue in studying any specific piece of assessment method. Other than the marking responsibility, there are other responsibilities before the marking, such as criteria generation and choice of assessment tasks at the design stage, and feedback giving and results reporting after the marking. All those procedures were seen as the teacher's work in the past; however, students are becoming more and more active in those various steps. This change will be discussed further in the later part of student involvement in assessment.

The last dimension students need to know about is the representation of assessment results reporting and communication of the results between the assessor and the assessees. The most commonly seen result derived from the assessment is the grade or percentage mark, and traditionally these are given by the teacher in written format. The quantitative format of assessment results have been accompanied with the qualitative feedback in recent years. How assessment results will be communicated and what students should do with the results are less discussed or researched in the literature and practice, as they are presumably thought to be obvious to students. Nonetheless, on one hand in the national student surveys (NSSs), the dissatisfaction

with the received feedback was generally increasing in recent years (HEFCE, http://www.hefce.ac.uk/learning/nss/), on the other hand the teachers were complaining students' ignorance about the provided feedback and comments on their work. Carless (2006) has pointed out the problem was because the lack of shared perception and communication on this point between the teacher and students. In other words, students may not be aware of the feedback that have been provided by the teacher or may not fully understand the meaning of the feedback. For example, sometimes the teacher may give his or her thoughts about students' performance in a group meeting, or this kind of feedback may be given in the individual written format such as email, or may be in an informal conversation, but they might not seen as feedback or results of the assessment by students. Nicol (2010), Hounsell et al. (2008) and Carless (2006) strongly recommended the mutual dialogue and communication between the teachers and students on the issue of results reporting of assessment. Given the five key dimensions of assessment as defined above, the assessment practices in this research are investigated based on this structure.

2.4. Student Involvement in Assessment

In the last few sections, the development of beliefs about assessment and the role of assessment in the student learning have been reviewed in higher education context. In the light of demands on university educations for the 21st Century, traditional assessment has been claimed to be limited to accommodate those demands. This section will argue for the necessity of student involvement in assessment for the 21st Century higher education by comparing the traditional assessment with more innovative assessment where student involvement is employed. After that, research in the area of student involvement in assessment will be reviewed by presenting the emerging benefits of involving students in assessment and the challenges of this practice.

2.4.1. Why should students be involved in assessment?

In the UK, and many other countries, there has been a shift over the last decade in

views of what higher education is for. Especially in recent years, discussions on graduate attributes for the 21st century have been privileged in all kinds of academic forums. Many universities have undertaken a great deal of work to identify the key graduate attributes for the 21st century (e.g. University of Edinburgh, University of Sydney and University of Melbourne). Among those demands on university graduates in 21st Century, lifelong learning which is an attitude and capability of continuous learning and reflection for furthering graduates' understanding of the world and their place in it (Barrie, 2004) has been put an important mission to achieve. Nicol (2007, 2009) has argued that being able to monitor, critically assess and correct one's own or other's work is a key goal of the higher education and lifelong learning. In this broad context, involving students in assessment is seen as an effective way to accommodate the new requirements from students in the 21st Century. The comparisons of the traditional and more recent innovative assessment are attempted to understand the growing development of student involvement in assessment.

The limitations and problems of traditional assessment

Traditional assessment does not necessarily mean a particular method of assessment such as the examination or the essay writing, but depends on the nature of all the five dimensions of the assessment as outlined earlier. Serafini (2000) has defined traditional assessment as 'assessment as measurement' which emphasises its summative function. Falchikov (2005) has argued that traditional assessment is characterized by the use of a limited number of assessment methods and techniques (Falchikov, 2005). Besides the methods and purposes distinguish the traditional assessment from innovative assessment, other dimensions such as the content of assessment, the result reporting of assessment, and the role of students in the assessment are also important indicators to tell the differences. Table 2.2 compares the characteristics of 'traditional' and 'innovative' assessment and illustrates what is mean by 'traditional' and 'innovative' in the present study.

Table 2. 2: Comparisons of traditional assessment and innovative assessment

Five dimensions	Traditional assessment	Innovative assessment
1. What to assess?	Declarative knowledge	Intellectual abilities and other transferable skills
2. How to assess?	Solely rely on one particular assessment method	Use combination methods of assessment
3. Why assess?	Summative purposes for accountability	Formative assessment for aiding learning
4. Who assesses?	The authority or the teacher solely	The teacher, or the peer students, or student themselves or collaboratively
5. How to report?	Quantitative grade/ percentage mark	Quantitative grade with qualitative feedback

First, in the assessment as measurement paradigm, the traditional assessment normally takes 'objectivity, standardization and reliability as priority over concerns of teacher and student involvement' (Serafini, 2000). Therefore, validity of marks is the main concern to the marker, rather than to understand the student. Birenbaum (1996) noted that one of the negative consequences of such assessment would be the teacher teaching to the test or teaching the test. For students, Rowntree (1987) highlighted the negative side of such a situation where students are motivated only by the extrinsic rewards and regard learning instrumentally rather than expressively.

Under this paradigm and priority of assessment, the student is seen as an object rather than an individualised owner of learning. This is well argued in Mann's (2001) analysis of student experiences of alienation at universities. She argued that a student's alienation in academic life is associated with the positioning of student who had been put in academics' discourse. For example, normally students would be seen as a type of student in discourse such as first-year student, or failed one in last semester, rather than seen as an individual. She argued that this has the potential to provoke a sense of estrangement and disorientation in academic life. Mann also

argued that the assessment task in this situation is seen as a series of outputs to be produced rather than a process which students should enjoy and from which they should learn.

Secondly, because the first main concern of traditional assessment, there is little flexibility on the methods of assessment, and it heavily relies on one single method. The lack of diversity and variety on the choice of assessment methods usually results in the risk of being unilateral.

Thirdly, in terms of the purposes of the assessment, traditional assessment is usually for the summative purposes for accountability rather than use the information to improve students' learning.

Fourthly, who assesses implies the power relation to some extent. It is argued that the students have absent ownership of the learning in traditional assessment. Boud and Falchikov (2006) have asserted that traditional assessment undermines students' capacity to judge their own work and constrains the lifelong learning agenda. As in traditional assessment, students tend to be voiceless and have little control over the assessment, but simply do what the teacher asks them to complete and wait to be judged and assessed. In this kind of assessment, the teacher-student relationship is hierarchical rather than a partnership. The vulnerability of student motivation and engagement in learning is most visible in this hierarchical relationship. Serafini (2000) and Black and Wiliam (1998) both refer traditional assessment as the 'black-box' which is largely controlled by the teacher and unseen by students. There is strong evidence that the lack of transparency in assessment in traditional assessment is more likely to encourage students' adoption of surface learning and game playing in assessment (Nicol, 2007).

Mann (2001) used Marx's concept of alienation to analyse the teacher-student relationship in this situation, and she called this kind of assessment as an imposition on the student by the lecturer of the choice of the timing, content and process of learning tasks. Therefore, it is not the learners who own the learning process, but the

teachers. She argued that as a result of this, it may be possible for some students to feel themselves alienated from their very selves, struggling to find a voice and a path through which their own learning desire can be expressed and pursued.

Finally, in the provision of result reporting, qualitative feedback is usually not provided to students in traditional assessment. The only information to students is just a quantitative grade or percentage mark. However, feedback as a source for student to check out their own learning and identify errors, this numeric information is found to have very limited guidance on students' learning. In Gibbs and Simpson's (2004) conditions of good assessment, they have illuminated the important role of quality feedback in student learning. They have pointed out that regular and detailed feedback can enable students better self-monitoring their learning progress and self-regulating their learning.

In addition to the limitation on the five perspectives, traditional assessment is normally taken in a particular period, time is usually limited and there are restrictions on access to any help or assistance. It is therefore more likely to cause stress to students. Miller and Parlett (1974) reported that about a third of their sample of final year students experienced 'fair' to 'moderate' anxiety when facing end of session examinations, and nearly a quarter were regarded as belonging to the 'high' anxiety group. In a study at the University of Cambridge, academic problems have been found to be the primary cause of psychological distress (Surtees et al., 2000). Research shows that there appears to be a link between stress and surface learning. Ramsden (1997) reported that when students perceive a learning situation to be threatening they are more likely to adopt a mechanical, rote learning approach to tasks rather than a deep approach. Some research evidence also shows the association between anxiety and academic dishonesty. Falchikov (2005) has identified 34 pieces of research evidence from 1992 to 2002 to substantiate the argument that traditional assessment is more likely to encourage academic dishonest behaviour.

Potential advantages of involving students in assessment

By reviewing research that advocates student involvement in assessment, the range

of claimed benefits can be broadly grouped into two main types. One type of benefits is mainly from the teacher's perspective, such as decreasing professional pressure, time-saving on feedback. The other type is mainly concerned with improving students' learning and learning skills. However, the latter is the main concern of the present study.

In terms of improving students' learning, there has been increasing research evidence to show the overt advantage of involving students in assessment. McDonald and Boud (2003) have found that the use of self-assessment has improved students' performance in the final examination. In Taras's study (2001), students were found to be more capable of identifying and correcting errors in translation. Other than evidence from the studies on students' performance, benefits perceived and reported by the students are also evident in scholars' work. For example, Davies (2000) has reported increased benefits perceived by students who experienced the peer assessment. Similarly, both Lapham & Webster (1999) and Sivan (2000) have found the boost of confidence in learning from students' peer assessment. However, the benefits perceived by students are largely in relation to the learning skills, and three aspects of those reported learning skills are found to be noteworthy in the literature.

Self-regulation is to 'develop knowledge, skills, and attitudes which can be transferred from one learning context to another' (Boekaerts, 1999). In Nicole and Macfarlane-Dick's seven principles of good feedback (2006) has argued that the development of self-regulation in students can be fostered by the self-assessment. As the development of self-assessment skills will provide students opportunities to practice self monitoring. Nicol (2007, 2009) argued that learners' self-regulation could be developed only if there were regular opportunities for them to evaluate critically the quality and impact of students' own work or the work of their peers after its production.

Critical thinking as one of the most important graduate attributes for the 21st Century, John Dewey (1933) argued that learning to think and reason are fundamental goals of education. Many scholars in higher education have called for a

focus on the development of critical being as a prime purpose of higher education, such as Barnett (1994, 1997), Brockbank and McGill (1998). Critical thinking thus has been a recurrent concern of higher education. Overwhelming evidence suggests that it is one of the most highly esteemed goals in higher education in recent years. For instance, a goal aimed at increasing the proportion of college graduates who could think critically was included in the Goals 2000: Educate America Act of 1990 (McBride et al., 2002) and critical thinking is understood as 'a defining concept of the Western University' (Barnett, 1997, p. 2). It is a 'commonplace assertion' that universities develop a critical attitude in their students (Barnett, 1992, p. 193), and employers claim to seek graduates with critical abilities (Harvey & Green, 1994).

Self-assessment or peer-assessment provides opportunities for students to critically evaluate the quality and impact of students' own work or the work of their peers, the development of self-assessing or peer-assessing skills engaging and involving students into formative and feedback requires fully understanding the assessment criteria, critical thinking and making judgments about the quality of the work. Jaques (1991) has argued that the involvement of students in the process of peer assessment could develop their critical appraisal skills, and Schon (1987) also noted that it could develop students' reflective skills. This finding has also been advocated by many other researchers in their more recent works, such as Falchikov (2007), Boud (1991, 2000), Tan (2008, 2004), and Carless (2006).

Other transferable skills are also frequently mentioned together with employability in recent debates with regards to the students' involvement in assessment. A view of higher education as preparation for employment (Gibbs, 2006) has come to the fore in the UK over the last two decades. The UK Quality Assessment Agency for example, specifying curricula in terms of learning outcomes, has required new kinds of assessment designed to assess 'key skills', 'transferable skills', 'generic skills' or 'graduate attributes' rather than assessing solely the acquisition of knowledge. Research evidence has also showed the contribution of student involvement made to the students' acquisition of transferable skills, such as presentation skills and communication skills. As the central feature of involving students in assessment in

essence is to empower the student to be the active player in the assessment process and learning, many responsibilities that used to be done by the teachers are now undertaken by the students. For example, the negotiation of criteria generating or feedback giving involves intensive communication skills that students can develop and use for life.

Table 2. 3: Summary of SIA benefits

Type of benefits	Example of related literature studies
Increased performance	McDonald and Boud (2003) Taras (2001)
Increased learning skills	Nicol (2007, 2009), Falchikov (2007) Tan (2008, 2004)
Enhanced other Transferable skills	Lapham & Webster (1999) Leach (2001)
Positive emotional and affective influences	Sivan (2000) Lapham & Webster (1999)

Given the limitations of traditional assessment approaches, it is assumed that involving students in assessment should help to alleviate problems found in traditional assessment. To conclude what have been pinpointed with regard to the advantages of involving student in assessment, Table 2.3 summarises the discussion and related literatures.

2.4.2. How could students be involved in assessment?

There is extensive research which shows that there are different ways of putting this notion into practice. Some use peer feedback giving, but not necessarily involving students in marking or grade giving. Some use self-marking, while some use rather flexible approaches which allow students to negotiate on tasks or criteria. It is difficult to bring them all together into an integrated model and evaluate which one is the best. However, from various ways of involving students in assessment, Table 2.4 explains particularly the level and strategies of student involvement in assessment.

Table 2. 4: Levels and strategies of SIA

Level of Involvement	Strategies of Involvement
- Choices on tasks - Guided marking or feedback giving - negotiating or generating assessment criteria - Self-designed assessment	- Peer marking, peer feedback giving - Self marking, self reflection -Teacher and student collaborative assessment

Both Leach (Leach et al. 2001) and Brew (1999) have generated three levels of involvement at which students could be empowered. Similarly with their typology, Table 2.4 above shows the degrees of students' autonomy in assessment, and the way in which the autonomy is given. For example, at the first level, by giving some choices on the assessment tasks, students can have some autonomy to decide the time, and the form of assessment task. At the level of marking and feedback giving, students have greater autonomy at the decision-making level; the next level is covered by criteria generating, and the last is reflection. As Brew suggests, at this level, student involvement requires the presence of an emancipatory component to empower them to take responsibility for their own learning. More responsibility means more power; students are given more power to make important decisions on their own: such as selection of criteria, weightings of each criteria, and the aims of assessment including learning outcomes. On these last two levels, students are required to be reflexive on the criteria and their own learning.

From this table, it is noted that involving students in assessment does not merely mean self or peer assessment. Peer or self assessment is a relatively general and vague way to describe the practice of involving students. For example, peer assessment can be used for feedback giving alone, but not necessarily grading; or self assessment can be used in group work but not in individual work. Earl emphasizes (2003) that in changing assessment other changes need to occur in teaching, classroom organization and in the interaction with students and parents, but not simply one method or one thing in the process.

From the review of related literature of traditional and innovative assessment in the prior section, it is known that students can be involved in any one of the five dimensions of assessment. However, the five dimensions also can represent the assessment process. Linking back to what has been discussed about the traditional assessment and innovative assessment, Figure 2.2 represents the assessment process in traditional assessment, and Figure 2.3 suggests a new assessment cycle by which student could be involved.

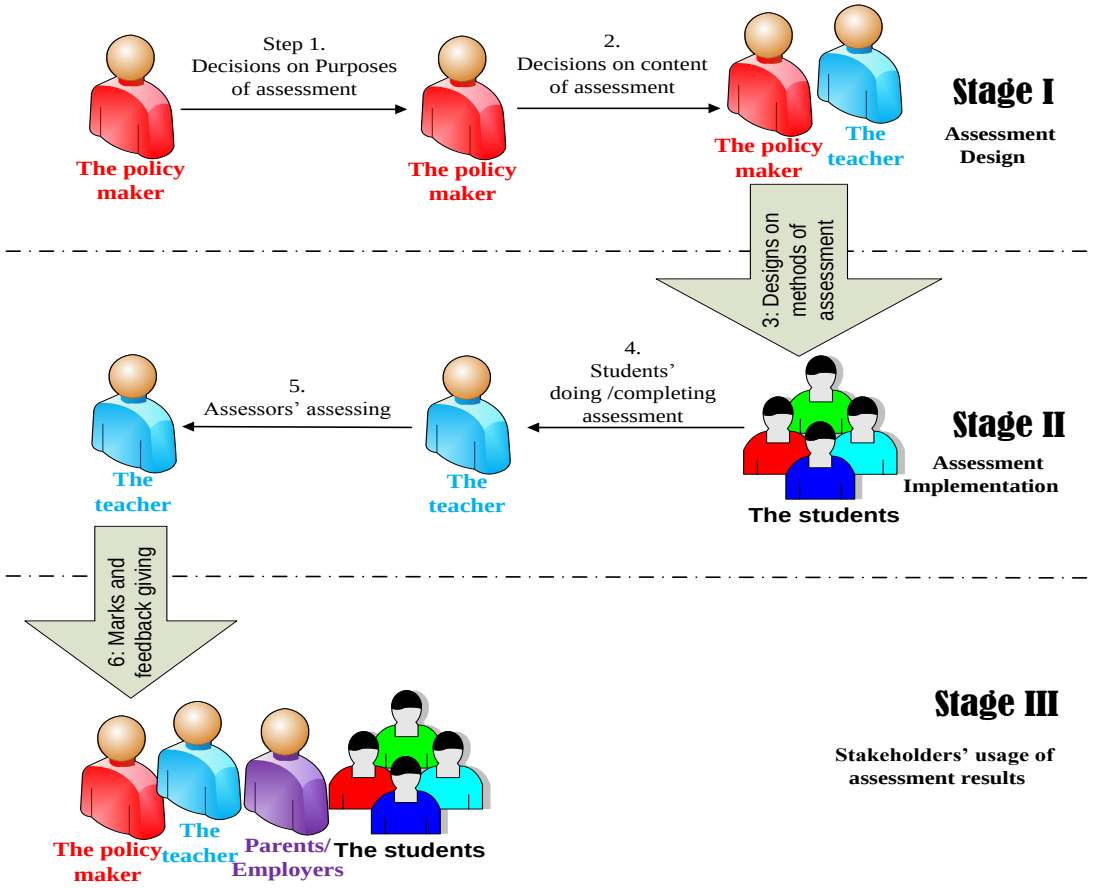

Figure 2. 2: Assessment process in traditional assessment

Clearly, in traditional assessment, the students play a part only in completing the assessment (stage II, step 4), at most in using the results but this depends on different students and the different kinds of result that students can make use of. As discussed earlier in traditional assessment the results often consist only of a numerical mark with no qualitative feedback provided, this kind of result is relatively less beneficial

to students, so it can hardly be largely used by students. At the decision-making stage (I), students, and in some cases even tutors and teaching assistants have no say in it; for most of the time students have no idea of what leads to the decisions that are made. During the completion and assessment stage (II.), in this situation, there is no interaction between the assessors (e.g. the teacher only) and the assessees (e.g. the student). At the stage II, students' completion of the task (step4) and the teacher's assessing the task (step 5) is a one-way process and is typically undertaken separately following the chronological order. At the last stage (III), the usage of results by different stakeholders is usually a discrete activity. Policy makers, administrators, teachers, students and parents rarely have conversations with each other about the result or the process as a whole. To summarise, students take the smallest part in this traditional assessment process where it is a one-way process with no interaction among the stakeholders and between each step.

In fact, students could be involved at any and every stage of the assessment process. Figure 2.3 illustrates how and when students could be involved in the newly formed assessment cycle. There has been enough evidence to show that students could be involved at any single step in this process. For example, involving students in marking (step 5) is a common practice, such as by using self assessment as Taras (1999) did, by peer assessing each other's poster in Orsmond and his colleagues' study (1996) or by peer feedback giving as Liu and Carless (2006) did in their study. All these studies suggested better engagement from students in understanding the quality and standard required by the assessment. Others have also introduced an element of transferring power to give students the choice of generating their own assessment criteria or designing their own assessment tasks in step 2 and 3. For example, Boud and Tyree did this as early as 1979. Machel and his colleagues (2003) involved students in identifying criteria for making judgments before carrying out the assessment at the designing stage. Their studies suggest the process of involving students in the development of performance standards can help students to clarify and identify their performance targets, although the process can be complex and very much depends on the teaching and learning environment.

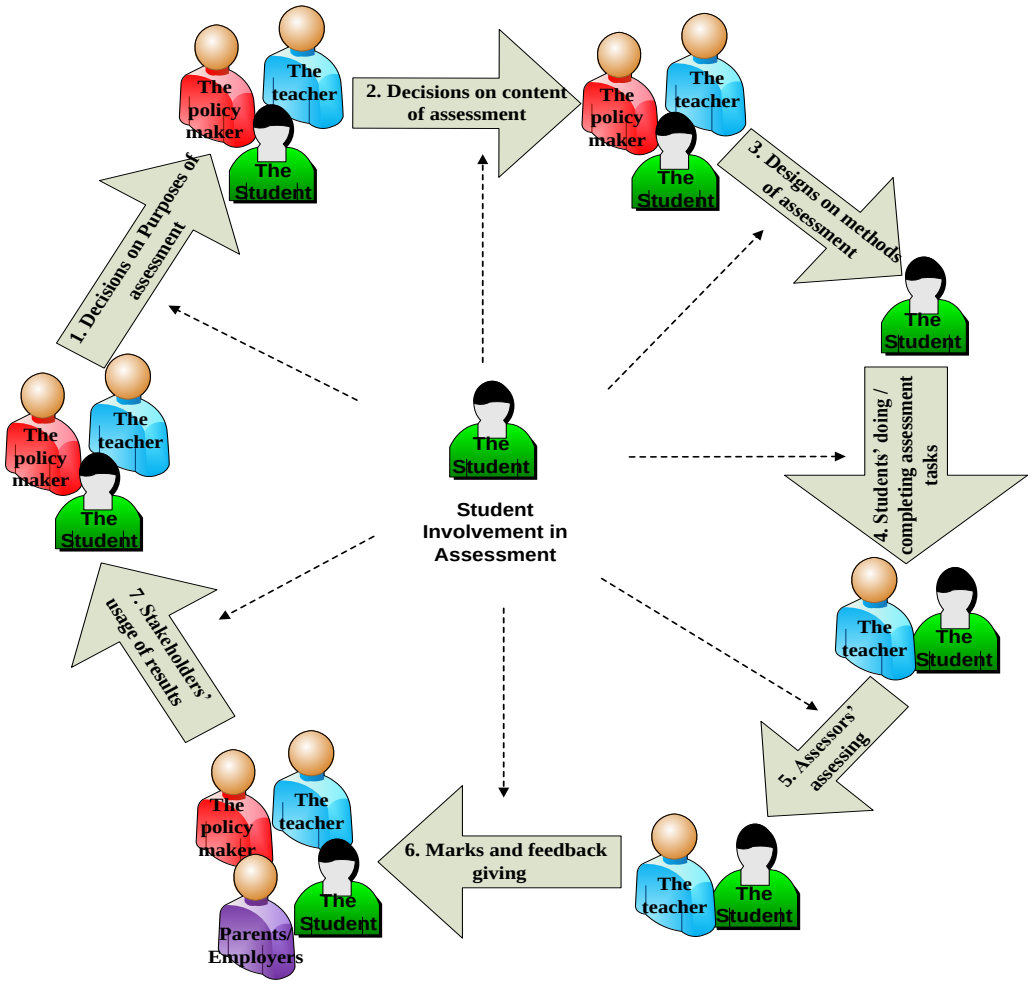

Figure 2. 3: Assessment process in the student involved assessment cycle

As seen in Figure 2.3, the situation is transformed when students are involved in different steps at every stage of the assessment process. In this newly formed assessment cycle, apart from completing the task itself, every other job is shared by teachers and students, sometimes policy makers and other stakeholders are involved as well but not exclusively. It can also be noted that in this model (in Figure 2.3), another main difference compared with Figure 2.2 is that every single step is connected with each other, and every role in each step is an interaction with another partner.

In recent years there has been expanding literature discussing the practice of

involving students in the assessment process itself, meaning that most attention has been paid to involving students in steps 4, 5 and 6 of Figure 2.3. Much of this has been informed by the seminal work of Sadler (1989), who established that feedback could actually only have an effect if a student was able to: develop an understanding of the standards and qualities required in their subject; relate their own performance and the feedback on it to those standards; and take action towards producing higher quality work. This clearly requires active engagement of students in the assessment process and, in a broad sense, self-assessment (Boud, 1995; Nicol, 2009).

Based on these premises, a growing body of work in higher education has developed around practitioners' attempts to engage students actively and explicitly as assessors, rather than simply being assessed by others (for example, Orsmond et al. ,2000). For instance, studies have concentrated on developing and investigating the outcomes of strategies that help students to better understand assessment processes (Bloxham and West, 2007; Cuffe and Jackson, 2006). Others' attention has specifically focused on finding ways of developing students' understanding of the qualities and standards of good work in their discipline, such as active use of assessment criteria in workshop discussions and use of exemplars (Price et al, 2007). Recently, work has focused on the acquisition of tacit understandings through student participation in disciplinary communities (O'Donovan, Price and Rust 2008).

Arguably, though, most of these studies have focused fairly specifically on students' views of a particular intervention or innovation. By contrast, few studies have focused on the student experience in a more holistic and embedded way, taking into account the whole learning and teaching environment, the whole assessment cycle as represented in Figure 2.4, and students' prior experiences and assumption. This is an issue which the present study seeks to address. This is an important approach to take because many exponents of student involvement in the assessment process (e.g. Boud, 1995; Nicol, 2009; Carless et al, 2006; Price et al, 2012; Sambell et al, 2012) argue that the term 'assessment' needs to be rethought and seen as embedded in learning and teaching, rather than being seen as a distinct or discrete practice in its own right.

2.4.3. Challenges of involving students in assessment

It is not surprising that the dominant discourse of assessment in higher education is still focusing on "measurement of" students and "feedback to" students as noticed by Boud (2007). Both of the foci underline the passive role of learners. That is, students are seen not to have been encouraged to be responsible for their own learning and to be assessed or provided with feedback by others. From this, it is not difficult to understand that there is still some way to go to achieve fully assessment as learning in its fullest sense in higher education, although there have been many innovative practices in the formats of assessment.

The most frequently raised issue is the reliability of the assessment in which students are involve in decision making. For example, Peer and self assessment have been the most frequently used strategies for achieving greater student involvement. There have been many attempts to use peer or self assessment, and there have been many problems and challenges reported from these practices. There are many studies of peer and self assessment that emphasize and investigate the agreement between teachers' and students' marking. Some studies have suggested that ratings from the student and teacher can be quite similar (Hays and Hays, 1973). Others found differently, such as Orsmond et al (2000) who drew the conclusion that even using the student constructed criteria did not increase agreement between student and tutor.

Another issue about involving students in assessment is the question of readiness of students. This readiness includes both the capability and skills that are required by student involvement in assessment and the attitude with accepting the responsibility. Many students may complain that assessment is not the responsibility of students, but of teachers. Many researchers like Dochy (2001), MacDonald (2000) have suggested what can be done regarding this issue. For example, giving students choices in this matter, or asking students who have had such experiences to share their experiences with fellow students, discussing with students the aim and purpose of self or peer marking. Once students perceive the significance and benefits to their learning, it is argued, they will understand that assessment is not only about a job or a task that has

to be done.

The last but not the least common problem encountered by teachers and students is the dynamics of social relationships in the process of peer assessment. Some evidence shows that students may trade off the marks by simply agreeing to award each other a better mark for their good relationship. This over-marking was found by Lapham and Webster (1999) in their study of peer assessment of seminar presentations. Although, Falchikov (2005) in her review suggested that this may not be very common. In the present study, it was found to be an important related phenomenon.

In conclusion, all these various problems have been recognized by researchers and solutions have been proposed to cope with them. However, teachers and students are still finding that, in practice, it is difficult to bring about student involvement in assessment. There is a lack of research investigating the reason for these problems and challenges. In order to make them more visible, the experiences and perceptions of students who are at the centre of this innovation must be more fully investigated and understood.

2.5. Student Learning Experiences of Assessment

2.5.1. Conceptions of learning

Research evidence has shown that 'learning' is conceptualized differently by students. In Saljo's (1979 a, b) study, five specific conceptions of learning were identified by students: 1) learning as the increase of knowledge; 2) learning as memorizing; 3) learning as the acquisition of facts, procedures, etc., which can be retained and/or utilized in practice; 4) learning as the abstraction of meaning; 5) learning as an interpretative process aimed at the understanding of reality. Later, Marton et al. (1993) characterized six conceptions of learning as 1) increasing one's knowledge; 2) memorizing and reproducing; 3) applying; 4) understanding; 5) seeing something in a different way; 6) changing as a person. Eklund-Myrskog (1997) also

summarized five similar conceptions of learning from her study. Those conceptions of learning have been found directly associated with the students' academic performance (Richardson, 2000). They are also found to be corresponded with the surface or deep learning approach (Burnett et al., 2003). For example, Burnett et al. (2003) suggested that in Marton and his colleagues' six conceptions of learning, the first three conceptions were related to the surface learning while the later three conceptions were corresponded with the deep learning.

Moreover, the 'quantitative' and 'qualitative' perspectives about learning identified by Biggs (1994) are also found to be evident in those conceptions of learning outlined above. For example, Eklund-Myrskog indicated that 'remembering' and 'applying knowledge' were quantitative conceptions, while 'understanding' and 'forming a conception of one's own' were qualitative conceptions (Richardson, 2000). However, those conceptions of learning are all based on the learning outcomes ('what has been learned?') rather than the learning process ('how learning has taken place?'). Richardson (2000) also commented that the phenomenographic investigations like Marton and his colleagues' investigation of conception of learning were "generally concerned with the product of learning rather than the process of learning".

By contrast, one of Saljo's conceptions of learning is seeing the learning as a ("interpretative") process. This is aligned with the notion from Illeris (2002) who also admits that learning is the "results of individual learning process" (P.14). Traditionally, the word 'learning' is used to describe human cognitive process of acquiring knowledge. Illeris (2002) argues that learning is not only a cognitive process of acquisition of a content of knowledge ('skill' or 'meaning'), but also an emotional process and a social process of interaction between the individual and its surroundings. As illustrated in Figure 2.4, this conception integrates three dimensions of learning, including both internal acquisition process (on the top) and outward interactive process (at the bottom) of a student's learning.

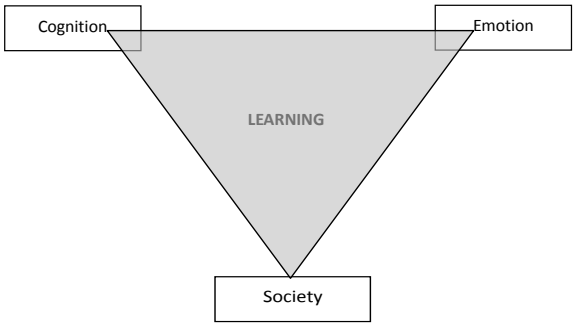

Figure 2. 4: The three dimensions of learning (Illeris: 2002, p.19)

Compared with other conceptions of learning, Illeris' conception is more likely to capture the holistic picture of student's learning, especially with the context of this study in which assessment is seen as an integral learning environment in students' learning, and the learning is seen as the experience of a student's journey. As argued by Illeris (2002) that experience also has elements of content and knowledge, as well as emotional and social elements (p.146), 'learning as experiences' set out as a key concept in this study. The proceeding sections in this chapter further explore the role of assessment in student learning and how such learning experiences could be investigated.

2.5.2. The role of assessment in student learning

Universities around the world typically state their mission in terms such as developing their students' problem-solving ability and creative skills and encouraging them to become independent, lifelong learners (Watkins, Dahlin & Ekholm, 2005). However, how students' creative thinking and learning can be encouraged is another question. Although there are many personal and contextual factors that influence the students' learning, there is a considerable body of research showing that "assessment drives institutional learning" (Biggs, 1996). Rowntree (1977), in the beginning of his book, pointed out that if we wish to discover the truth about an education system, we must look into its assessment procedures:

> *What student qualities and achievements are actively valued and rewarded by the system? How are its purposes and intentions realized? To what extent*

are the hopes and ideals, aims and objectives professed by the system ever truly perceived, valued and striven for by those who make their way within it? The answers to such questions are to be found in what the system requires students to do in order to survive and prosper. The spirit and style of student assessment defines the de facto curriculum.

Rowntree (1977)

Research on student learning has not only opened up a better understanding of students' approaches to studying and conceptions of learning, but also highlighted the contextual influences on students' approaches. Each individual student has his or her own preference for a particular approach to learning. Nonetheless, the same student may have different approaches to learning in different situations. Entwistle (1998) has proposed that there are two influential factors that determine which approach is adopted by the learner. According to his argument, besides the factor of intellectual development, a student's conceptions of learning and the learning context ('teaching and learning environment') are also important to student learning. This conception includes the student's conceptions of assessment.

Biggs and Tang (1999) concurred with Ramsden that, from the students' point of view, assessment always defines the actual curriculum. Ramsden (1979) also reported his evidence on what he referred as 'cue seeking', and Rowntree claimed a similar phenomenon as 'side-effects' in his work (1977). To refer to the effect of assessment on student learning, Biggs and Tang called it the 'backwash' instead. Figure 2.5 explained that to the teacher, summative assessment comes at the end of the teaching-learning sequence of events, but to the student it is the first thing to be concerned. Nevertheless, the teacher's 'intended outcomes' may not be the same with the final outcomes perceived and achieved by the students who see the assessment as their priority.

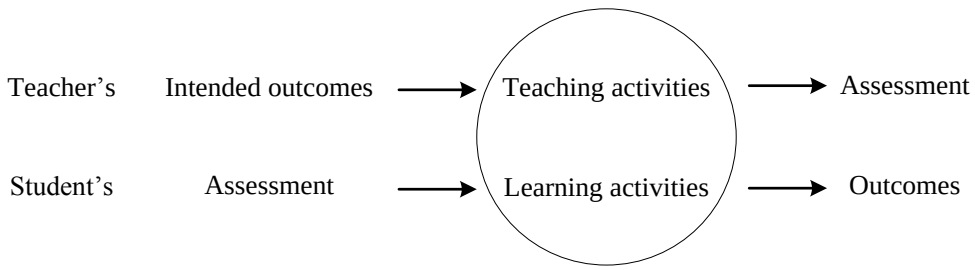

Figure 2. 5: Teacher's and student's perspectives on assessment From Biggs and Tang (2007)

Among the side-effects of assessment illustrated by Rowntree (1977), students' knowledge of the assessment has been identified as an important factor to influence students' learning. His example of students' awareness of the teacher's premier concern of the assessment has expounded that the clarity of expectations from the teacher could stimulate students to maintain a high level of effort. In this case, the teacher's 'intended outcomes' are more likely to be the same as the final outcomes achieved by students. This example on the one hand acknowledged the importance of students' knowledge of the assessment. On the other hand it demonstrated what kind of "side-effects" this body of knowledge could bring to their learning. The effects of assessment may cause on the student learning are briefly outlined here firstly. In the next following section, the five dimensions of assessment give the details of what knowledge of assessment students need to be informed.

The assessment in general can affect students' motivation and effort to learn. Rowntree highlighted the side-effect of the extrinsic rewards of assessment on student learning. He argued that too many students are encouraged to regard learning and education instrumentally valuing them as means towards the satisfaction of goals external to the self rather than expressively valuing them as opportunities to express and enlarge one's capabilities. Newble and Jaeger (1983) described how changing the clinical assessment from a pass/fail, based on ward reports, to a clinical practical examination increased the amount of time spent by medical students on the wards.

Compared with the direct link to student motivation and effort that has been reported hugely, there is also an unintended emotional aspect of assessment associated with the student learning. This aspect has been relatively under-researched but has had a substantial impact on student learning in both the short term and long term (Boud and Falchikov, 2007; Varlander, 2008). Many of us may be aware of the stress brought to bear on students as well as teachers by assessment, especially in the traditional assessment culture where examinations were used for selection and competition. Vice versa, the positive emotion such as feelings of success in the assessment may also boost the student's confidence in self and a long-lasting interest in learning as found by Boud and Falchikov (2007) in their study of adult learners'

experiences of being assessed. The examples shown here do not imply the simplistic conceptions of positive emotions having good learning results and negative emotions resulting in bad effects. However, to some degree, those studies have shown significant role of emotions brought by the assessment in the student learning.

Other than the motivation and emotion, the assessment also can influence the cognitive acquisition of subject knowledge in the student learning. The content of assessment can be perceived by students as the important knowledge areas. Many researchers have pointed this out, for example Van der Baleuten and Driessen (2000) have stated that "students will define educational success as success in the assessment programme" (p9). In other words, assessment will determine what students learn. If a student failed an examination which contained lots of factual details, the student would perceive his or her failed score as a signal that more reproductive learning was demanded. Therefore, his learning would be affected in order to achieve the perceived "outcome". Snyder (1971) has described the way how students strategically using assessment work out what content they ought to study and what could be safely ignored. The study from Miller and Parlett (1974) also supported the finding of the assessment 'game' that students are playing.

In addition, the assessment can also influence how students learn. The student's learning strategy and approach will inevitably be affected and changed to achieve the perceived learning "outcome". Students have been found to differ in terms of the quality of their learning when instructed to focus either on factual details or on meaning and assessing evidence (Biggs, 1979). Once a student perceives the assessment result as the instruction, he or she will be encouraged to focus on the content or outcome which has been assessed according to his or her achievement. While Gibbs (2006) has pointed out that assessment frames learning, there have been plenty of examples that have illustrated how traditional assessment methods such as multiple choice questions (MCQ) could promote the surface approach to studying (e.g. Davies, 2000; Dochy et al, 1999; Scouller, 1998).

The "backwash" effects called by Biggs and Tang (1997), or 'side-effects' called by

Rowntree (1977) are usually perceived in the sense of negative influences. However, the effects of assessment on the student learning mentioned above have asserted that they are neutral themselves, and it is possible to use the role of assessment to turn the negative effects into positive aids to students' learning. For instance, investigations of assessment result and feedback giving have found that different ways of reporting results can give students different degrees of motivation for learning. Even the small difference which is caused by the plus or minus grading may have different effects on students' learning. Malone, Nelson, and Van Nelson (2002) have argued the motivational advantages of plus/minus grading in their study. It is believed that maximizing students' knowledge about assessment can be one way of minimizing the negative effects of assessment on the student learning.

What have been discussed above demonstrates the important role of assessment in student learning. Different assessment designs can bring students with different experiences in learning. For example, group-work as a design of assessment method that has been commonly used in current higher education is a way of encouraging collaborative or cooperative learning. Collaborative and cooperative learning are sometimes interchangeable in some literature. Both collaborative and cooperative learning involve students working in a group for a common learning goal. Collaborative learning has been referred as a learning situation where "students actively contribute to the attainment of a mutual learning goal and try to share the effort to reach this goal" (Teasley and Roschelle, 1993 quoted in Janssen et al., 2010). While in the cooperative learning, students pursue a common goal but are assessed individually with a clear and structured division of labor and responsibilities among group members (Janssen et al., 2012; Prince, 2004). The most distinctive feature in practice is that group members normally are given the same mark according to the group effort on a piece of work in collaborative learning, while in cooperative learning context, individuals are allocated with different marks according to their own contributions to a piece of work.

2.5.3. Student learning experiences

As one of the most important and frequently commented educational matters in students' learning, the role of assessment has been well illustrated with its development and the characteristics in the preceding writing. In this section, students' learning experiences of assessment will be discussed especially with a focus on the framework of Biggs' 3P model which leads the current study of student involvement in assessment. Research into students' learning experiences of assessment has been broadly falling into two categories. One of them is the research that strives to investigate the influence of assessment especially different methods of assessment on students' approach to learning. Studies in this category usually employ the quantitative approach utilising inventories to test and compare students' approaches to learning in different kinds of assessment. For example, using Biggs's study Process Questionnaire, Scouller (1998) has found that MCQ and short-answer tests tend to induce surface approaches, while essay and assignment writing are more likely to encourage deep approaches. More recently, a study conducted by Baeten et al. (2008) has employed the Revised Two-Factor Study Process Questionnaire and the Assessment Preferences Inventory aiming to investigate the relationship between students' approaches to learning and their preferences of assessment methods.

The other one category is those attempting to reveal students' qualitative learning experiences in a particular assessment especially those with the element of student involvement. Research in this category has been steadily increasing recently. Compared to research focusing on the methods of assessment, these studies are more interested in other dimensions of assessment, such as what to assess, why assess, how to report the results, and who should assess. For example, the discussion of criteria clarity (e.g. Donald and Denison, 2001), the privileging of formative assessment for learning (e.g. Sadler, 1989; 1998; Taras, 2002), the emphasis on quality feedback (Hounsell, 2007; Hounsell, McCune, and Hounsell, 2008; Gibbs and Simpson, 2004), and the rise of peer- and self-assessment (Tan, 2004; Boud, 1995; Brew, 1999) have occupied the centre of the literature in assessment. In addition, unlike the research utilizing inventories to measure students' approaches to

learning, these studies in the latter category seem to be more diverse and open on the methodology focusing attention not merely on the students' approaches to learning but wider aspects of students' learning experiences, such as perceptions of assessment tasks (e.g. Brew, Riley, and Walta, 2009), emotions during learning (e.g. Gammon and Lawrence, 2006) or development of autonomy in learning (e.g. Sambell, McDowell, and Sambell, 2006).

With the effort of previous work, research in assessment has provided an insight in students' experiences of various kinds of assessment. However, most of the studies in those two categories have focused their study on one or two aspects or issues of students' learning experiences in a particular assessment. Some of them elaborate the material from the perspective of teaching, and some of them report issues of learning remaining in the perspective of assessment outcomes. There is a limited space for most of them to draw a fuller picture to connect the teaching, learning and assessment. There is a lack of studies to explore students' learning experiences of assessment in a more holistic structure. This research gap has been noted by Gardiner (1998) and Howe (1999) for a while as described in Clare's (2007) study. There is now a growing attention and substantial amount of literature discussing the teaching, learning and assessment and broader sense of the learning environment, there is still a need for closer scrutiny from perspective from the students (Clare, 2007). The current research is attempting to fill this gap using Biggs's 3P model of learning as framework to explore a fuller picture of students' learning experiences of involvement in assessment.

The 3P model of learning reflected Biggs' (1987, 1999) constructive alignment of teaching, learning and assessment. Biggs conceptualises learning not as a passive process, but rather as an interaction between the learner and the learning environment (Biggs and Tang, 2007). Although this model has been undergone many minor changes over the years, the principle factors that constitute this model remain the same: presage, process and product (as seen in Figure 2.6). This model has been found to be a useful device for structuring discussion of the components and dynamics of educational experiences (Freeth and Reeves, 2004). However, despite of

the widely endorsed usefulness of this model, few studies (Baeten et al., 2008; Ellis and Calvo, 2004; Freeth and Reeves, 2004) have employed it to structure the discussion of students' learning experiences. The components of this model and reasons for employing this model for the present study will be elaborated by the following writings.

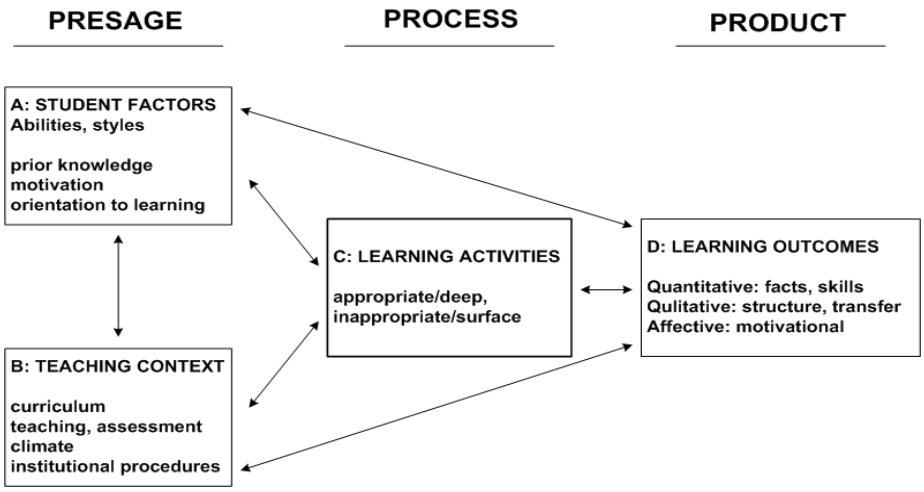

Figure 2. 6: The 3P model of teaching and learning (Biggs, 2001)

Presage

The presage is the stage where before the learning activities take place. There are two main presage factors identified by this model: personal factors that come from the student, and the teaching context which originally was called as 'situational' factor referring to those factors creating the climate in which the learning tasks are undertaken (Biggs, 1987). Biggs (2001) has highlighted students' prior knowledge, soft factors such as motivations or orientations to learning, and the hard factors such as the ability, intelligences, or cognitive styles. The 'situational' factor can include the structure of the course, the design of curriculum, the methods of teaching and assessment, and the relationship or the climate of the learning community. In fact, those situational factors constitute the 'academic environment' or more specifically refers to the 'teaching-learning' environment. Although there is no agreement or specific definition of what constitutes the academic environment in the literature (Ramsden, 1979), with the growing interests focusing specifically on the issues of

teaching and learning, the 'teaching-learning' environment has been emphasized a lot.

Entwistle and his colleagues (Entwistle et al., 2003) used 'teaching-learning' environment to describe a broad range of potential influences on student learning in the ETL project. In their concept map, this environment covers social, cultural, political, and academic contexts at the institutional and departmental level. More importantly and distinctively, their work on the teaching-learning environment directly relating to students' experiences, has identified four key aspects of this environments which 'seem most likely to affect student engagement with studying and the quality of learning achieved' (Entwistle et al., 2003). The four key aspects are: teaching assessing content, course contexts which seems to be the module settings, staff-student relationships, and students and student cultures. The first two aspects seem to be the presage factors which are supposed to be set before the learning, and the later two aspects seem to be more relating to the process of learning. Besides those presage factors mentioned above, students' perceptions of those situational factors are also important. It has been well argued and widely recognized that 'students' learning is related to their perceptions of the environment' (Ramsden, 1979) by many scholars (e.g. Entwistle, 1991; Wierstra et al., 2003; Entwistle, McCune, and Hounsell, 2003; and Baeten et al., 2003; Biggs, 2001).

Process

Approaches to learning is the key component of Biggs' 3P model of learning, and originally consists deep, surface and achieving approaches to learning. However, deep and surface approaches of learning are often applied to the practices, and the achieving approach is often to be combined with them. Although the premier aim of this study is not to test students' approaches to learning on these different modules, this concept is a useful device to indicate what has been going one as students learn. Biggs uses the concept of approaches to learning to describe students' engagement in the learning process. He refers it to 'the ways in which students go about their academic tasks, thereby affecting the nature of the learning outcome' (Biggs, 1994).

Product

In this model, the final component is the product factors which normally refer to the learning outcomes achieved by students. There have been substantial studies focusing on examining the link between approaches to learning and the learning outcomes especially the academic performance, such as Grade Point Average (GPA) comparison. Fewer studies examined the link on the more 'soft' learning outcomes or qualitative learning outcomes, such as students' confidence. Biggs and Tang also noted that research on the students' feelings has been relatively limited (Biggs and Tang, 2007). Illeris' (2002) three dimensions of learning has argued that the learning is in fact a process of cognitive, emotional and social process. In this sense, it seems to be necessary to look at the products of learning from those three perspectives. The three aspects of learning have reflected what Entwistle and his colleagues' concept of teaching-learning environment which includes the social and cultural aspects of teaching and learning.

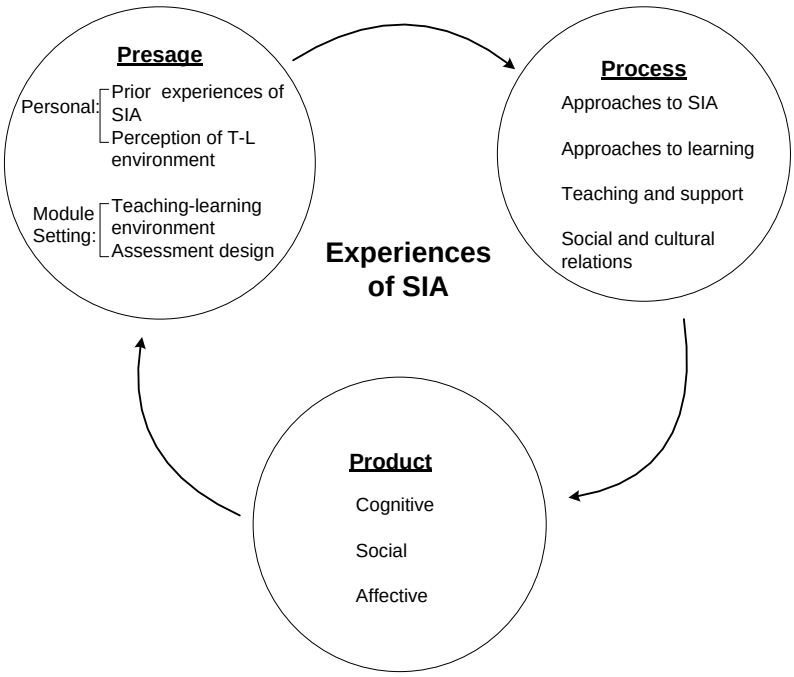

Figure 2. 7: 3P loop of SIA

In the context of students' involvement of assessment, by employing the 3P structure, Figure 2.7 draws together the components that have been discussed above but with

specific focus on the student involvement in assessment. In the presage, student prior experiences of SIA, the module settings especially the assessment design, and students' perceptions of such module settings are closely reviewed in this study. The process of SIA is studied from the lens of students focusing on their approaches to learning and approaches to SIA. However, teacher support and other social and culture dynamics are also taken into consideration in this process. Finally, the product of SIA is mainly explored from the qualitative perspective with a focus on the life-long learning skills rather than examining the 'hard' academic performance.

To conclude with a statement by Van der Vleuten and Diessen (2000): "students will define educational success as success in the assessment programme" (from Nieweg, 2004), this research emphasizes the central role of the student with the focus on the students' experiences of student-involved assessment. This chapter has outlined the key concepts of this current research. By identifying the research gap of students learning experiences, it also has provided the overall framework for this study. Based on the introduction of this topic, the next chapter is elaborating the specific questions that this current study is concerning together with the description of methodological designs.

CHAPTER 3 RESEARCH DESIGN AND DATA ANALYSIS

3.1. Introduction

This chapter aims to describe the methodological and analysis choices that have been involved in the current research investigation. It will demonstrate the whole investigation process and justify the decisions made in the research process. This chapter begins with an introduction to the research background which will revisit the research aim and research questions together with its conceptual framework and the research context. Secondly, the mixed methods research design will be explained. Thirdly, the specific methods and the processes for the data collection will be described in detail. After that, the strategy and process of data analysis will be illustrated. Lastly, the quality of this research design will be considered by discussing in a discussion of the most important issues in the social research.

3.2. Research Background

3.2.1. Research Aims and Research Questions

Before going into the detail of the research design and the investigation process, it is worth spending a little time to get to know the research background of the current investigation including the research questions and some background information about the study location. The research aims of the study are to understand better students' experiences of being involved in the assessment and the implications of this understanding. Student experience in assessment is at the heart of this investigation; however, 'experience' could be a general and vague term for carrying out the investigation. Therefore, the **process** of students carrying out the assessment tasks (especially with the element of student involvement tasks) has been identified as the research focus. In taking this focus, the **perceptions** of student involvement in the assessment of the students who are experiencing it, and the **learning outcomes**

perceived by the students are identified as valuable lenses, helping to provide insights into the nature of the learning that students gain from their experiences of involvement in assessment.

The research questions thus centered around four main foci as shown below (A, B, C and D). Sub-questions have also been developed to allow a more focused investigation. Firstly, the students' perceptions have been identified as an important lens for better understanding of their experiences. As assessment is carried out within a particular module, and assessment is strongly associated with the module context, the question about students' perception contains their views both of the particular module as a whole and of the particular assessment practice in the module. So, the first research question is framed as below:

A: What are the students' perceptions of being involved in assessment?

1) What are the students' perceptions of the module and module assessment where they are required to be involved in assessment to some degree?
2) What are the students' perceptions of student involvement in assessment?

B: What are the main factors to influence students' involvement in assessment?

The second thematic question is to explore the main factors which influence students' engagement of SIA. The third question is about the process of how the students go about their learning and go about the assessment tasks in which they are required to be involved in decision-making about the assessment. By answering this question, the more important 'why' question will need to be investigated. Why students choose to do their learning and assessment in a particular way in this process is translated into the sub-questions as shown below:

C: How do students engage with the process of student involvement in assessment in the module?

3) How do students go about the module assessment tasks and why?
4) How do students go about their learning activities in the module and why?

The final overarching research question is intended to explore the learning outcomes perceived by the students in this process. Given the explorative nature of this question, two aspects of student learning have been chosen for examination:

D: What do the students see themselves as having learned through being involved in assessment?

5) What has been gained and learned in this process from the students' perspective?

6) How do those experiences differ from their learning experiences in other modules?

On the one hand this study is seeking a better understanding of student experiences in the process of innovative assessment where students are involved in the decision-making. On the other hand, it is hoped this study will reveal how well such assessment has assisted students' learning, and whether it has worked for students in the way that such an assessment strategy is intended to do. Consequently it is hoped that this study could help academics with their assessment design and teaching instruction in such assessment process.

3.2.2. Research Conceptual Framework

Many experienced researchers (Miles, 1994; Creswell, 1994; Yin, 1994; Merriam, 1998; Anfara and Mertz, 2006; Hennink, Hutter, and Bailey; 2011) have illustrated the importance of a conceptual or theoretical framework for research. For example, Anfara and Mertz (2006, p.xxiii) in their book agree that "we would not know what to do in conducting our research without some theoretical framework to guide us" argued by Merriam (1998). For Merriam, the theoretical framework is derived from the "concepts, terms, definitions, models and theories of a particular literature base and disciplinary orientation" (p.46). This framework is essentially those concepts that are included in the research and the relationships between those concepts. Miles (1994) also describes a conceptual framework explaining "the key factors", "constructs" or "variables" and the relations between them.

Hennink et al. (2011) point out that an effective conceptual framework allows the reader to identify clearly the components of a piece of research and how they are linked. They also emphasize its role in depicting the research process. Merriam (1998), Yin (1994), and Creswell (1994), too, have agreed that the framework can affect every aspect of a study including framing the research question, data collection, data analysis and the interpretation of findings. Therefore, it is thought to be necessary to introduce the conceptual framework for the current study in this chapter, in order to guide readers to a better understanding of the research designs and investigating process of the current study.

The conceptual framework for this study originates from Biggs' (Biggs, 1989) 3P Model of student learning which was discussed in the previous chapter and has been adopted and applied to understand the assessment process in this study. Based on what Biggs (1989, 1987) described as the three stages of learning: the stage before learning begins (Presage), the stage of learning (Process), and the stage after learning has happened (Product). The conceptual framework for this study as shown in Figure 3.1 below is the transformed 3P model for understanding the process of student experiences of assessment. In this section, the role of this model and meaning to this study are mainly described.

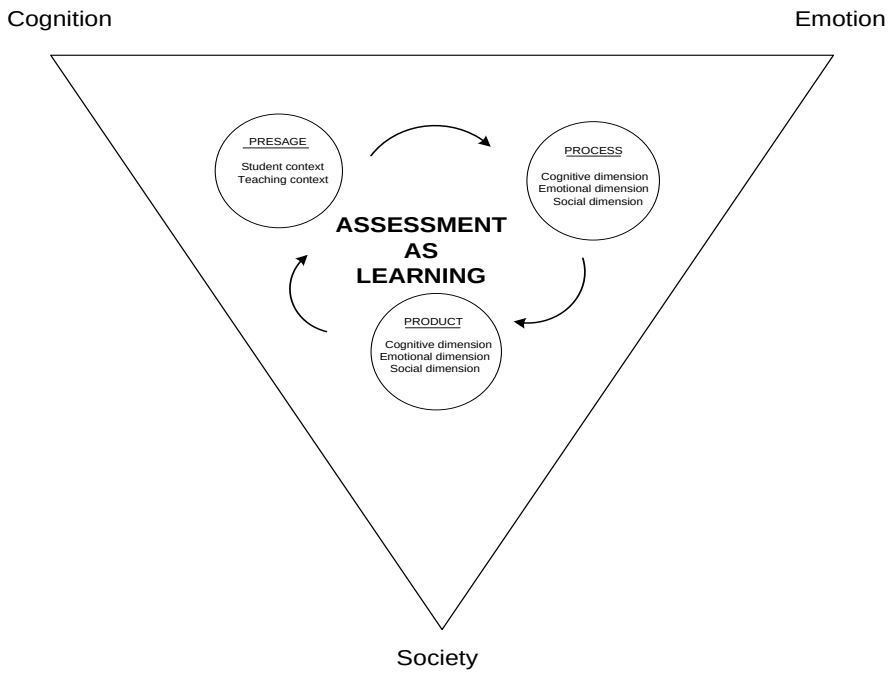

Figure 3. 1: Research conceptual framework

This conceptual framework has provided the study with an overall structure to guide the investigation. The research subject "assessment", in the middle of Figure 3.1, informs the key concept that students experience assessment as a learning experience or a learning journey. The inner circle in the figure implies a complete cycle of the learners' experiences of a particular assessment. By adopting Biggs' 3P model of student learning, student experiences of a particular assessment are studied from three stages respectively. Context factors in the "presage" that exist before the assessment takes place includes the learners' own characteristics and experiences which they bring with them, and the teaching and learning environment that have been provided by outside of the learners. At the second stage: "process" where the assessment takes place, the focus of the study switches from the contextual factors to the learners. How the learners go about the assessment tasks and learning activities are investigated through Illeris' three dimensions: cognitive, emotional and social as proposed in the outer layer of the framework. At the same time, the cognitive aspect, emotional aspect and social aspect of assessment are also explored. The "product" stage explores the outcomes of such assessment experiences in terms of what is

thought to have been be gained and learned by the learners. It is also kept consistent with the three dimensional framework as the "process" stage. As argued before in Biggs' 3P model, the "product" from the experience of current assessment could be fed forward to the learner's next learning cycle as the "presage" characters.

Hennink et al. (Hennink, Hutter and Bailey, 2011) argue that the conceptual framework can provide the structure to the study, and help to clarify the focus and concepts in the study. Further, forming this framework guided me to the data analysis. It is also important to be aware that this conceptual framework is not simply formed by bringing the two theories together at the beginning of the research. The formation of the conceptual framework is a process of both deductive and inductive reasoning while the research is being carried on. The formation of the framework and the investigation is a two way interaction rather than a one way deductive process. Firstly, the inner cycle of the 3P model was adopted while studying previous research works in this area. It was modified as the framework to refine the research questions and reflects the theoretical assumptions adopted in this study. In contrast, the outer layer of the three dimensions was not included in the framework initially, but emerges from the data. Therefore the research is not purely theory driven as called "fixed design" research by Robson (2002). The deductive and inductive process was evident throughout this study process from research design to data analysis.

However, Anfara and Mertz (2006) have argued that a theoretical framework can allow the researcher to understand certain aspects of the phenomenon being studied while concealing other aspects. In other words, there is no framework that is perfect and can contain all perspectives of what is being studied. Every conceptual framework in a research project provides a unique view of the phenomenon being studied, but it does not mean that this unique view is the only way of understanding that phenomenon. This matter of quality will be further explored in the discussion and implicate chapter.

3.3. Research Design

3.3.1. Research Traditions in Assessment

As discussed in the previous chapter, with the changes of assessment cultures, assessment for learning and assessment as learning have been paid unprecedented attention. Studies in the area of assessment traditionally had a strong focus on the learning product and marking reliability, and now have switched to focus on the student learning process and how assessment can aid and enhance learning. Under such changes, varieties of research methods have been used to collect more evidence of student learning experiences. The previous emphasis in the field of assessment largely on quantitative research methods has changed as more and more qualitative research and mixed methods of research has been done in this area. Research traditions in the area of assessment are outlined in this section by following the thread of development in assessment culture that was introduced in the previous chapter. As argued, the culture of assessment has experienced three different stages, in line with those changes, research approaches and methods that are adapted by those studies at different stages.

Research on assessment and studies of the impact of assessment on learning prefer quantitative research methods to monitor students' learning approach under different assessment environments. For this, various inventories have been developed. The best known is Biggs SPQ, and after that, Entwistle and his colleagues' Lancaster Inventory of Approaches to Learning (e.g. Handley and Williams, 2009; Gijbels and Dochy, 2006; Rust, Price, and O'Donovan, 2003)

However, with the prevalent use of peer and self assessment, and the search for innovative assessment practices for learning, the quality of feedback and effectiveness of assessment for assisting learning have become the concern of more recent studies on assessment. Qualitative research methods have been favored by those studies. (e.g. Orrell, 2006; Poulos and Mahony, 2007; Poon, McNaught, Lam, and Kwan, 2009; Bloxham and West, 2007; Cartney, 2010).

Quantitative and qualitative research methods are the main two research methods which are widely used in social research. In some traditions, quantitative and qualitative research is seen to be two diametrically opposed research approaches. They are seen as differing not only in the nature of the data sought and the subsequent methods of data analysis, but also in their philosophical rationale. Until the middle 1970s the tendency was to associate valid research almost exclusively with scientific methods (Walliman, 2005). As "to do any research we must be able to measure the concepts we wish to study" (Kidder and Judd, 1986, P.40), qualitative approaches were given scant attention because of their perceived inability to conform to the conditions demanded by particular views of the scientific method. However, qualitative research developed significant differences in its assumptions and principles from those of quantitative research. Recently, its value has been recognized, and thus it has been widely used for social research.

Bryman (1988) has discussed the contrasting features of these two research approaches. Qualitative research is typically used to construe the attitudes, beliefs and motivations within a subject. The researcher doing qualitative research will attempt to obtain an inside view of the phenomenon, getting as close as possible to the subject of the research. By contrast, the quantitative researcher is more likely to remain distant as an outsider to in an attempt to collect hard and reliable data.

Beside these, another research approach has recently emerged in the academic field, and that is the mixed methods research approach. Compared with the previous two research methods that have been used in assessment studies, the mixed research methods which involve combining the two research methods into one study is relatively less used but with a increasing tendency in research in this area (e.g. Brew, Riley and Walta, 2009; Hu and Lam, 2009; Pieterse and Thompson, 2010).

3.3.2. Research Design: Mixed Methods Research Design

Mixed methods (MM) research is also known as combined methods research or multi

method approach. There have been many definitions of mixed methods research, for example, Onwuegbuzie and Turner (2007) presented 19 different definitions of MM research. Based on those various definitions, Johnson and his colleagues' definition as cited and accepted by Teddie and Tashakkori (2009) has been thought to be the easiest to understand and explicit for the researcher.

> *Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purpose of breadth of understanding or corroboration.*

Creswell and Clark (2007) also have commented, as a research approach or method, MM focuses on collecting, analyzing and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone. The key feature of MM is 'combination' as identified by Creswell and Clark or 'integration' as emphasized by Teddie and Tashakkori. In other words, it means the 'interaction' between quantitative and qualitative research methods across the different stages of research.

All research begins with a question (Williams, 2003), which determines the methodology used. According to the research aims and questions of the current investigation, it has been decided the MM research would be the most appropriate design for the reasons explained below.

First, both deductive and inductive enquiry processes have been involved in the current investigation ranging from the conceptualization stage, through the experiential (which includes methodological and analytical stages) stage, and inferential stage. This is the one of the characteristics of MM research design.

Secondly, Figure 3.2 presents the overview of the research design. As can be seen in Figure 3.2, the first and second research question (research question A and B) aims to

enquire *'what students' perceptions of being involved in assessment in the module'*, and '*what the main factors to influence students' involvement in assessment*' are. "What" questions can be answered reasonably well by quantitative methods, and "why" and "how" questions can be investigated in-depth by qualitative methods (Silverman, 2000; May, 2001). As explained earlier in the survey, one of the most frequently used quantitative research methods in social research, provides a fast and relatively inexpensive way of discovering the characteristics and beliefs of the population at large (May, 1997). There are the many kinds of surveys; the detail of data collection by this method will be described in the next section. This quantitative stage of enquiry has adopted a deductive process using a previously developed framework to get a broad, general picture of students' perception and learning approaches in the modules. It is also designed to provide initial findings to inform the qualitative research at the next stage.

The second stage is to further explore students' perceptions and their responses, and more importantly, to explore the reasons behind them. Asking students to fill in the self-reported behaviour survey can also help the investigation of how students respond in their learning and assessment tasks, which is my second leading question. However, as many researchers (Silver, 2000; Bayman, 1988; Creswell, 2009) have argued, quantitative methods do have limitations. Facts and hard figures alone are not enough to understand the phenomenon fully. Purely quantitative methods may neglect the social and cultural perspective and influences on people's 'views', 'attitudes' and their 'perceptions'. My third main question (research question C) which is concerned about the *'how'* and *'why'* of students' responses needs qualitative methods to further explore the reason behind the phenomenon found by the quantitative surveys. It will allow the researcher much more 'sustained contact' (Bryman, 1988) to gain a closer and richer picture of the context of the enquiry.

In the second stage, although the qualitative methods are adopted, the initial findings from the quantitative research at the first stage have also contributed to developing the interview instrument. Therefore, it is not hard to see that the current investigation relies on both research methods, not separately but interactively and collaboratively.

This interdependence of the two research methods is more evident in the last main research question (research question D).

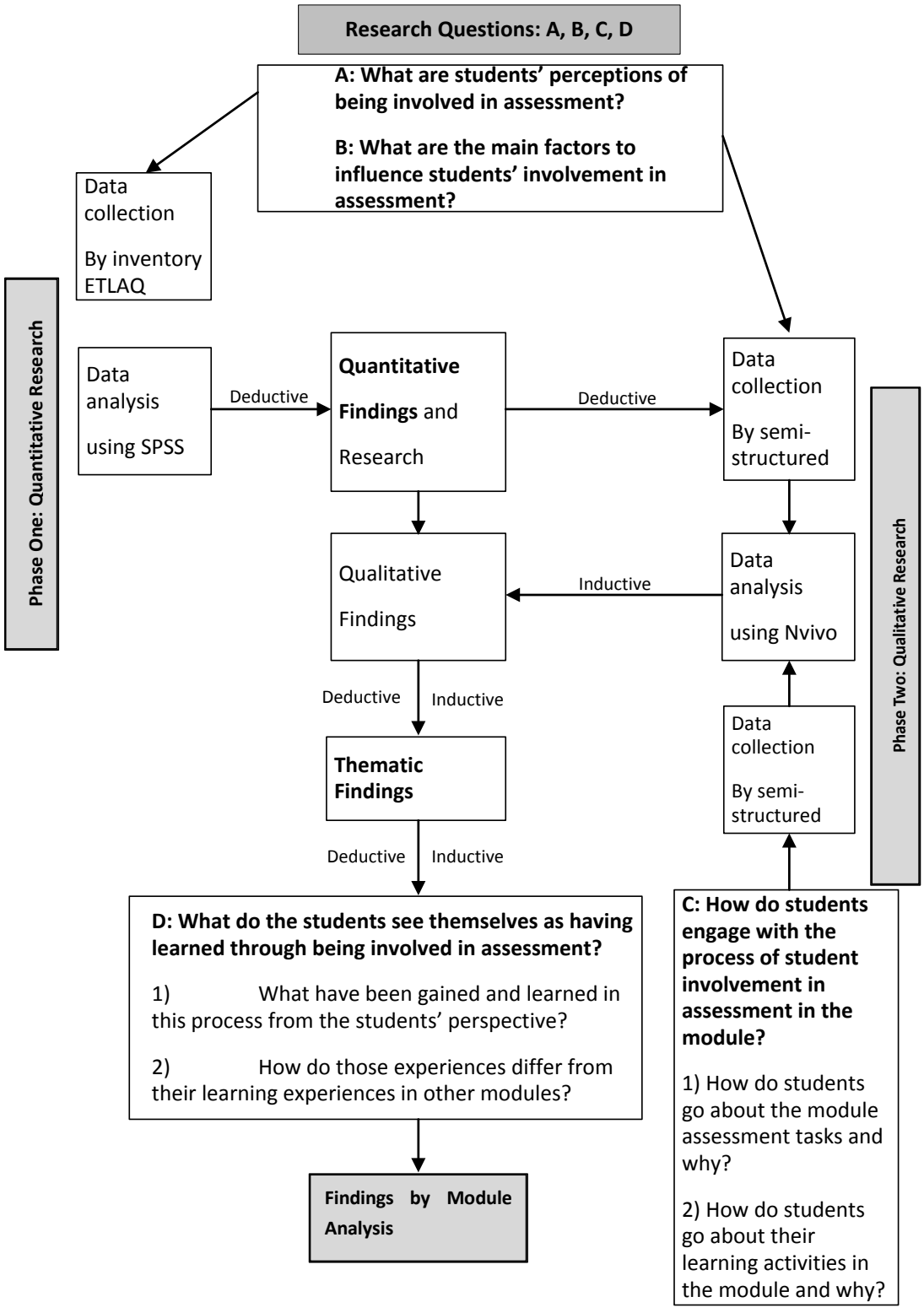

Figure 3. 2: Overview of Research Design: Explanatory Sequential Design

Thirdly, considering the validation and reliability of research findings, using different research methods can ensure results not biased by adhering to one research method. Bryman (2006) highlights the benefits of using mixed research methods, as it "provides such a wealth of data that researchers discover uses of the ensuing findings that they had not anticipated." Also researcher Karavas (1993) and Patton (1999) have maintained that using the multi method approach can add to the validation of the research finding. It provides strengths that offset the weaknesses of both quantitative and qualitative research. By using mixed methods, more comprehensive evidence can be found for the research problem.

There have been different typologies proposed trying to categorize the different ways of carrying out MM research. For example, according to the different roles that quantitative and qualitative methods play in the research process, Cresswell (2007) has suggested four main models for mixed research methods: triangulation designs, embedded designs, explanatory designs, and exploring designs. While Teddie and Tashakkori (2009) has listed five categories: parallel mixed designs, sequential mixed designs, conversion mixed designs, multilevel mixed designs, and full integrated mixed designs. However, it is accepted that MM research is a rather flexible in way of proceeding. MM research itself maintains the position that the research questions drive everything. For this reason, current investigation was not intended to be framed by a particular model, but rather open to research design with regards to the research aims and questions. Therefore the following section about the MM research design of the current study has no intention of categorizing it into a particular model, or of forming a specific way of doing it, but rather of explaining the choice and decision made at the point of research design.

3.4. Data Collection

3.4.1. Sampling

Certain criteria were applied when selecting the modules. Not only did I considered the precondition which was the involvement factor but also the level of student

involvement in the assessment process was considered as an important factor for my selection of the module. This was intended to investigate whether there is any difference in the impact on learning as a result of the variation of involvement.

To conclude, the purposive sampling was carefully designed and selected for my research purpose. As Patton (1990) states "the logic and power of purposive sampling lies in selecting information-rich cases for study in depth" (in Merriam, 1998), I intended that my selected sampling would be the "information-rich cases". The data were collected from three modules from Business and Management programme in two different institutions. All the three modules have an element of student involvement in assessment but at different levels. The details of three modules are contained in Table 3.1.

Table 3. 1: Sampling modules

Module	Level	Assessment Methods	Student Involvement
A. Managerial Finance (30 students in total)	Optional for year 1, 2 and 3.	Online self assessment (20%) --Continuous class tests (20%) --Final written examination (60%)	Self-assessment
B. Strategy Management (450 students in total)	3rd year compulsory	Portfolio includes --part one: evidence of a set of continuous assessment tasks during the learning process (30%). --part two: an 3000 words individual report (70%)	Peer assessment Peer group feedback giving
C. Science Management (250 students in total)	4th year compulsory: 1st or 2nd semester for joint Honour's; 1st and 2nd semester for single honour's	--Honour's project reflection (10%) --Activity1. 90% for joint Honour's, and 45% for single honour's --Activity2. 45% for single honour's only	Group designed assessment tasks Peer assessment

3.4.2. Inventory Surveys

Based on previous research on student learning and the teaching-learning environments, assessment procedures have been found to be a particularly important

influence on how students learn (Biggs, 1999; Entwistle, 1998, 2000; McCune, 2004; Hounsell, 2007, 2008). This recognition of the influences has also been paralleled by the development of a variety of self-report questionnaires designed to assess differences in how students learn and study (Entwistle & McCune, 2004), such as the well-known inventory Study Process Questionnaire (SPQ) designed by Biggs (1987), Approaches to Studying Inventory (ASI) designed by Entwistle and Ramsden (1983), and more recently the ALSI (Approaches to Learning and Studying Inventory) which forms part of LSQ (Learning and Study Questionnaire) and ETLQ (Experiences of Teaching and Learning Questionnaire) designed by Entwistle and his other colleagues in the ETLE project (2001-2005). Entwistle and McCune (2004) have detailed and clarified the most frequently used inventories. According to them, most previous inventories focus on describing the different ways in which students go about their academic work, but few have been designed to link how students learn with the teaching-learning environment. ETLQ is the one which has incorporated the previous instrument on students' approaches to learning but also has explored their interrelationships with teaching-learning environments.

The choice of instrument for quantitative research is a crucial stage for the whole research, as it will determine the nature of data and research findings. There is a considerable advantage in adopting the well-established instrument. As the well-established one can ensure the validity of the measurement, and it can also save the researcher a lot of time. Miles and Huberman (1994) argued that the choice of research design and research method depends on the nature of the enquiry, but also on other practical matters and the context in which the research is to be done.

However, it is not easy to find an instrument which is a good fit for the purposes of a particular study, as every research project has its own aim and purposes. What most researchers, especially novices, do is adopt a suitable existing instrument and modify it if necessary. For the present study, a decision was made to adopt the inventory in ETLQ, as it serves my research aim quite well. The aim of my research is to understand students' experiences in assessment in higher education in terms of their perceptions and response to the module. In this inventory, there are measurements of

both students' experiences of the teaching-learning environment and their perception of the environment. Assessment, as argued in a previous section, is a form of teaching-learning environment. Especially as it shares the same framework under the concept of 'learning approach', this inventory fits my research question. Secondly, it is well established and the validation has been tested in a large scale project. Also it is the most recent inventory available for research on students learning. Thirdly, it has also been tested and used by several researchers in varied subject contexts, for example by Hounsell, McCune and Nisbet (2003) in Biology, by Xu (2004) in Economics.

However, due to the practical consideration of response rates and quality, this inventory was not used in exactly the same way as in the ETL project. The original project used two questionnaires, while for my study, I integrated the two into one questionnaire format. Therefore, some scales and items were not be used, while some were modified; also some new items were added in accordance with the SIA for the current research aims. There were originally five parts in both questionnaires. Part1, reasons for taking the course unit, from LSQ, was not included in the questionnaire for the current study due to the limited length of the questionnaire. More importantly the focus of this study was intended to be on the SIA, rather than the approaches to studying, so the reason for taking this module was considered as not important as other components of questions. In addition, this issue could be explored in the interviews instead. Part 2, items of approaches to studying were mainly adopted from ETLQ, as those items from ETLQ were designed specifically to examine students' approach to studying for the module rather than in general. One of the research questions was to explore how students go about their learning in such environment, and the approaches to studying in the specific module were important to the current study. Part 3, perception of teaching and learning environment, was mainly adopted and revised from ETLQ; 11 new items were created, and one item from LSQ was added to enhance the measurement of assessment aspect, and two items (items 35, 40) were revised in terms of wording, and lastly, one item (19) was replaced by the item from another revised version (SETLQ) of ETLQ. Part 4 in the questionnaire of this study was about students' satisfaction with the module, and was newly created

by myself. In the original ETLQ, there was another part of learning achieved, was not included in this questionnaire for this study, as the current study was not intending to evaluate the module and students' learning outcomes from the quantitative way. The revised questionnaire for this study can be seen in the appendix A.

3.4.3. In-depth Interviews

Choices of forms

For the qualitative part of the research, interviewing was the main means of data collection. Merriam (1998) points out that when the researcher cannot observe the researched subject directly, interviewing is necessary. Due to my research questions, students' perceptions, views, feelings and their personal experiences of interaction with assessment cannot be fully captured by the closed questions in the questionnaire or by observation which was practically and technically impossible; therefore the interview method is an efficient way to know how people behave, feel and interpret the world around them. In-depth interviewing was chosen, because it provides an opportunity to explore the complexity and in-process nature of meaning and interpretations that cannot be examined using positivist methodologies (Liamputtong and Ezzy, 2005). There are many forms of interviewing in terms of the structure, the number of participants, and the way of interviewing. For this research, all the interviews were carried out in semi-structured form, face-to-face, and individually. Hennink et. al (Hemmink, Hutter and Bailey, 2011) defines an in-depth interview as "a one-to-one method of data collection that involves an interviewer and an interviewee discussing specific topics in depth" (p.109). According to their description of in-depth interviews, the way of interviewing in this study seemed to fulfill the characteristics of what they called "in-depth" interviews.

Firstly, semi-structured interviews were designed to guide the data collection. This is the most common approach and it has been widely used in social research (Robson, 2002). Unlike the structured interview, this type of interview has flexibilities in depth of discussion, sequence of topics and focus of attention given to different topics, but

at the same time it can provide an outline to guide the discussion. Structured interviews are advantageous in quantifying precise answers to precise questions, which would be done in my quantitative research part. In the qualitative research part, personal experiences and perceptions of assessment were expected to be explored, and those were expected to be different interpretations of even the same phenomenon. Unstructured interviews give more freedom to the interviewee, but they are thought to consist of lengthy and intimate conversation (Robson, 2002). As a novice researcher, it is not an easy decision to take; conversely the semi-structured interview would give me some control over the content of the conversation to keep data collection as focused as possible. Furthermore, by taking time into account of the lengthy of interviews, the semi-structured interview was not an easy option as far as recruiting the interview participants is concerned. Therefore, the semi-structured interview seemed to be more suitable to this exploration. It overcomes the lack of flexibility of structured interviews and the lack of structure in unstructured interviews.

Secondly, the interviews were conducted by the researcher with each participating student individually. The group interview or the focus groups were not considered to be the best form of data collection in this research. Although the focus groups may be highly efficient since the number of participants could be increased significantly at one time, the depth and volume of topics for interview could be limited to some degree. For this study personal experience and the process of this experience in assessment were rather important in the group discussion, as there might not be enough time and space for students to do the in-depth reflection on their personal experience. The other reason for one-to-one interviewing was based on the consideration of the sensibility of some topics and personal information which might be included such as assessment grades, personal background or social relations among the students. However, in focus groups, the confidentiality could be problematic. The subjects of focus group discussion are usually other people's experiences or collective perspectives rather than personal experiences or individual perspectives as Hennink et. al (Hemmink, Hutter and Bailey, 2011) have highlighted in their description of the in-depth interviews.

Lastly, all the interviews were conducted face-to-face. The use of face-to-face interviews has been recommended wherever possible. This is because face-to-face interviews offer much more information such as non-verbal cues which can help in understanding the verbal response (Robson, 2002). Particularly in semi-structured or unstructured interviews, the physical presence is rather important to allow the modification of the talking according to different responses. It also makes it easier for the researcher to establish a rapport with the participants. In conclusion, face-to-face interviews allow the researcher to obtain the maximum richness of data during interviews.

To conclude, the concept of "in-depth interviews" as proposed by Hennink et. al (Hemmink, Hutter and Bailey, 2011) reflect the essence and the main characteristics of the interviewing design in this study; therefore this term was used to describe the method of the qualitative part in this research. The in-depth aspect of interviewing used in this study reinforced the purpose of gaining a detailed insight into the research issues from the perspective of the student participants themselves. The choice of those forms of interview were inductively designed according to the research purpose and questions, rather than deductively taken from a certain type of interview as defined in the typology.

Interview participants and Interview schedule

The interview participants were from the questionnaire participants who filled in the inventory survey and expressed their interests in this interview and had provided their contact information. Initially there were 58 potential interview participants from the questionnaire; however, in the end, only 20 participants agreed and finally appeared for an interview. Table 3.2 summarizes the numbers of interview participants from each module and the actual number of interviews that were used in the final analysis.

Table 3. 2: Numbers of participants in interviews

	No. of participants	Actual No. of usable interviews
Module A	10	8
Module B	7	7
Module C	3	3

Two interviews were excluded from the data analysis due to its their validity and quality. One of them was because of the low engagement of the interviewee during the interviewing. The interviewee kept looking at his watch and stopped twice to take a phone call during the interview. Listening to the recorded interview afterwards, it was noted that the conversation was not as meaningful as expected. Firstly the content of the interviewee's responses was not relevant to the interview questions. Secondly, the interviewee's response was in the form of merely answering questions rather than having a conversation. It lacked continuity and trustworthiness. Therefore it was decided to exclude this transcript from the data analysis. Another interview was excluded, because the interviewee did not agree to the audio recording of the conversation. Although notes and memos were taken as much as possible, due to the conversational nature of the in-depth interviewing, the interviewer devoted considerable attention to engage with the participants in the conversation, and it was difficult to catch every word that the interviewee had said. This made the content analysis difficult in terms of valid evidence, therefore this interview was not included in the actual data analysis. However, these two interviews were not completely useless to the research, as the researcher gained some experiences and lessons from them for the interviews which followed. The data of unrecorded interviewing was not completely neglected in drawing conclusions, as it assisted in the confirmation of findings.

When the forms of interview were designed and agreed with both supervisors, a semi-structured interview schedule was prepared and developed for the interview data collection. The semi-structured interview schedule is usually seen as a guide with a list of questions to remind the interviewer about the topics and focus of the discussion (Hemmink, Hutter and Bailey, 2011). However this schedule is more than

just an aide-memoire to me; it is also a tool for me to guide the conversation with a logical but flexible structure. The development of this schedule was a process of deductive proposing and inductive refining. The schedule shown in the table below was the final version, but before this, there were different versions with slightly different questions according to different participants. The principles and process of the schedule development will be briefly outlined next.

Table 3. 3: Interview schedule in semi-structure

Introduction	**Brief introduction of the study and myself**
	Brief background introduction from the interviewee • Working experiences; • Study programme; • Reason for choosing this programme/module • …
Thematic Questions	**Probe/Prompt Questions**
A. General questions about experience of this Module.	1) How was your general experience in this module? • What were the best/worst features of this Module you took? • How different has studying in this module been compared with other modules you've taken?
B. Specific questions about learning and assessment experience on this Module.	2) What did you usually do for your studies on this Module? 3) What were you required to do with the assessment tasks and how did you do it? 4) What do you think is the most important for doing well in such assessment for this Module?
C. Specific questions about perceptions of involvement in assessment	5) How did you find the feedback you got (form the teacher/peers) last semester in this module? 6) How's your experience of peer/self assessing (or designing your own assessment tasks)? 7) How do you think about students being given such responsibilities?
D. Closing Questions: reflection on teaching-learning environment (Not recorded question)	8) Did you think you had enough guidance and support for doing this kind of assessment in this Module and why? 9) What did you get from this Module do you think will be useful for your later study and life? 10) How do you think your ways of your learning in this Module have been influenced by such experience above we talked? 11) Could I ask why you decided to come for this chat?

First, designing the overall structure of the schedule was based on the principle of keeping the conversation as natural as possible. Naturalness here means the logical order of the questions. Much methodology literature has suggested the logical order as comprising opening questions (Hemmink, Hutter and Bailey, 2011) or warming up questions (Robson, 2002), main questions, and closing questions. My design of this schedule followed this structure, and all the questions were carefully designed to be gradually more focused. It made it easier for the interviewees to talk and relate their experiences. For example, in the introduction, the interviewer together (who already had) the background information of this study was introduced to the interviewee. Then the interviewee was encouraged to make some introductory remarks about him- or herself about him or herself. It was hoped that some degree of rapport would thus be established, although this was not the only way to establish a rapport between the interviewer and the interviewees. The issue of interviewer and interviewee relationships will be further discussed in the interviewing section later. In the introduction, normally the interviewees would explain which programme they were following and which module they had just finished, so it was sensible and logical to follow this with the opening questions about their general views on the module.

Secondly, the prompt questions were carefully designed based on the research questions and conceptual framework of this study. In order to keep the focus on the research questions of this study, the thematic questions in the interview schedule were closely related to the research questions. They were developed first to guide the further prompt questions. As can been seen in the interview schedule in Table 3.3, the thematic question B, C and D reflected the research questions respectively on students' perceptions, process and learning outcomes towards the student involved assessment experiences.

Thirdly, the design of the schedule also reflected the mixed methods research design. In the interview, the structure of the inventory questionnaire was incorporated with the interview questions. The first part of student approach to study and the second part of students' perception of the teaching, learning and assessment environment in the inventory were reflected in the interview questions. The purpose was to confirm

and clarify the results obtained by the questionnaire, and also further to explore further the reason behind those quantitative findings. For example, question 2) in the table, invited the student interviewee to describe how he or she went about his or her studies and learning activities in the module. It was designed to compare their description with their self-reported result in the approaches to studying. As introduced before, the interview participants were from those who had filled in the questionnaire and left their name and contact information, so the results of the questionnaire would be identified. The details on how those two research methods were designed to be combined were illustrated earlier in the description of mixed methods design. The ways in which those two kinds of data were integrated with each other will be illustrated in the description of data analysis and in the findings chapters.

Lastly, flexibility was kept in mind through the design of this schedule. On the one hand the flexibility to encompass the three different module contexts with different teaching, learning and assessment environment. The questions were designed to be as general as possible to enable student interviewees to talk and relate to the different modules they were studying and also enable them to compare their experiences in the module with other modules. The scheduled questions were kept as simple and as short as possible to allow further specific context-related questions to be explored during the interview. Those more contextually specific questions might relate to the particular module, or to a particular participant's personal experiences. For example, one module might have used the online self assessment extensively as another module might have used group peer assessment. The questions and focus of the interview might be different according to the different contexts, but they should explore the same thematic foci as outlined in the schedule table above.

Interviewing

This section mainly described some issues that might arise during the interviewing, such as the timing, relationship, and the manner, tone and style of talk during the interviewing. All the interviews were conducted after students had finished the module and had done their module assessment. The table below describes the time

scale of the data collection. The length of the interviews ranged from 40 minutes to 65 minutes. This was kept consistent with the initial plan which informed the participant that the conversation would normally last from 40 to 60 minutes. It was suggested by Robson (2002) that anything under half an hour would be unlikely to be valuable while anything beyond one hour might be risky for recruiting the participants. Although this suggestion may not be definite, at least it has given us an idea of people's overall acceptance of the length of the participation in the research interviews.

The question of establishing rapport has been extensively discussed in the literature, and there are many ways which have been suggested of establishing a rapport with the interviewees. Rapport was distinctively important and challenging in this study, as the interviews were carried out at a single session which means there was only one period of face-to-face contact with the interviewees, and the contact time was extremely limited. Further, the researcher was comparatively distant to them, as I was not located at the same university as the interviewees. However it could be argued that the students might have felt able to be more open because I had no connection with their universities. In this section, the tactics for establishing such rapid rapport with the interviewees are presented below.

The first tactic was that I made the way of presenting myself and the study as honest as possible, and as close to the student participants as possible. My dual role of being a student myself and as a novice researcher for this research gave me a sense of how a student would feel about the people who may be similar to him or her and someone who may have a higher status than him or her. I chose to present myself as a student similar to them rather than a researcher or an outsider. Sadler (2008) in his Ph.D thesis also noted the advantage of being similar to the interviewees during the data collection. This similarity could ease and comfort interviewees enabling them to be as open as possible in sharing their stories and thoughts with the researcher. I also introduced the purpose of my study in an empathic way standing in the shoes of students. In doing so, I hope to make the interviewees understand that this study was closely related to them, was about their experiences, and was conducted for students

and by a student.

My second tactic was the tone and style of talk during the interviewing. It is said that a good interview is like a good conversation which is a two-way affair (Liamputtong and Ezzy, 2005). The semi-structured interview gives more space and freedom for the interviewees to express themselves. Bowling (1997) points out that an in-depth interviewing methodology that attempts to be more conversational and engaging requires greater skill and experience. In the interviewing, I was a listener but was also engaging with the interviewees to encourage them to talk and reflect on their experiences. In order to do so, the tone of the interview was more like a conversation.

Other than that, as Hennink et. al (Hemmink, Hutter and Bailey, 2011) indicated that the process of establishing rapport involved extensively social and communication skills (p.124). This includes greetings and informal chat prior to the interviewing, and body language during the interviewing, even your dress or the arrangement of the seats. Every single detail matters in such a short relationship. For example, this relationship might have been established prior to the interview, by contact either by emails or by phone for the time and venue arrangements. In the process, it was important to be considerate about the convenience of the participant.

All the interviews were audio recorded with the permission of the participants except one as mentioned before. Ideally each interview can be transcribed soon after it has been completed. As all the interviews were conducted in a short period of time by me alone, there was not enough time to do the transcription immediately after each interview, but the summaries and memos were written down as soon as each interview was completed. This preparation for data analysis is described in the following part.

3.5. Data Analysis

The data analysis was a long and interactive process which involved both deductive

and inductive analytic strategies. As the explanatory sequential nature of this mixed methods design, the analysis process was reported by the distinct interactive phases sequentially: quantitative data analysis and qualitative data analysis. Miles and Huberman (1994: p.10) in their description of qualitative analysis outlined three flows of activity: data reduction, data displays, and conclusion drawing and verification. Although the analysis methods in the quantitative and qualitative phases were different from each other, the general steps were similar in the process of analysis. Like Miles and Huberman's flows of analysis, four main steps of analysis in this research were involved in both phases: data preparation, data reduction, data displaying, and conclusion drawing. Those four steps were also used to structure the description of the complex processes in data analysis.

Firstly, in the data preparation step, data were processed into the forms that can be used by different analytical methods. The preparation included data labeling and data entry. As a computer was used to assist analysis in both phases, data must firstly be compatible and useable by the chosen computer tools. For example, SPSS was used to assisting the quantitative data analysis, so answers in questionnaires must be coded into numeric format that can be understood by SPSS. The details of the process in this step were described in the two phases of analysis respectively. Secondly, data reduction literally referred to the process of reducing the amount of information that has been collected in order to make it more manageable for further analysis. Miles and Huberman (1994) described this reduction process as involving "selecting, focusing, simplifying, abstracting, and transforming" the collected qualitative data. There were many ways of managing and reducing data; in this section the process of data management and reduction was described. Thirdly, "data displays" defined by Miles and Huberman (1994) was the process of organising, assembling and compressing the reduced data to enable conclusions to be drawn. The drawing of conclusions is the process of conceptualizing the display of findings. Miles and Huberman (1994) simply referred to it as the activity of deciding "what things mean", and in their view it included configuration and verification of the emerged meaning from the data.

Those steps formed an analytical cycle; as pointed out at the beginning the analysis process is not a linear sequence. Miles and Huberman (1994) argued the streams in this cycle are interwoven in a parallel form continuously and iteratively. Those steps were also inter-related, as a different choice of methods used in one step would lead to a different result in other steps, and vice versa, different results in one step would affect the researcher's choice of a particular method in other steps. The specific methods and techniques that had been used were described in each step of the two phases of the study.

3.5.1. Phase I: Quantitative Analysis

Data Preparation

The data preparation for the quantitative analysis was followed by three steps. The first step is coding and entering data into SPSS before the actual analysis. All responses from obtained questionnaire were coded and typed into the SPSS. There were in a total of 255 responses with 78 variables. 68 variables were from the likert scales in first, second and third sets of questions, and another ten were categorical variables but were assigned a numerical code. After that, second step was checking and cleaning the data by which some of the errors and missing data were identified and corrected. The third step involved some preliminary data examinations. Some basic assumptions for parametric statistic analysis were checked, such as sample size, normality of the data, skewness and etcetera. It was found that the sample size was reasonably applicable to the parametric analysis according to the general criteria of sample size (above 150 cases), but the data was found not normally distributed. The solution and the decision with related analysis techniques will be fully explained in the quantitative finding chapter (in Chapter 4).

Data Reduction

As known that there were 68 interval variables coded from the questionnaire, to refine and reduce the number of those items was the first step for further analysis, in order to form a smaller number of coherent subscales. The data reduction involved

mainly the factor analysis techniques in the SPSS. Due to the nature of the data set, the principal axis factor (PAF) was used to carry out the data reduction for the first, second and third sets of questionnaire questions. The specific process of analysis will be fully described in the next chapter where the quantitative findings are presented.

Data Displaying and Conclusion Drawing

The quantitative data and findings were displayed in two ways. First was using the graphs to show the visualized general picture of the data, and the other one was developing tables to summarize the data derived from the SPSS analysis. Those two ways of data displaying were found to be effective to present the findings and helpful for the conclusion drawing.

3.5.2. Phase II: Qualitative Analysis

The computer software package Nvivo was used to assist the qualitative analysis. It was one of the software packages from the computer assisted qualitative data analysis software (CAQDAS) program. The use of computers for analysis of text began in the 1960s (Silver, 2005). Many users commented on the advantages of using CAQDAS in qualitative analysis, such as high efficiency, greater accuracy and reliability (Gibbs, 2007; Silver, 2005; Robson, 2002) because it allowed quicker and easier access to material, while some limitations of it were also noted, such as limited help in analyzing small volumes of data (Silver, 2005), and its over-emphasis on code-retrieve approach in analysis (Gibbs, 2007; Silver, 2005). By reviewing those literatures in CAQDAS and exploring the use of some of the programs such as hyperlink and Nvivo, it was decided to use Nvivo to assist qualitative data analysis for this study.

The analysis in the current study focused on the content of the interview data. It would be beneficial to make use of the powerful function of CAQDAS on coding and searching. Nvivo is one of the newest and most popular CAQDAS tools, compared with past soft-ware it allows the examination of context of coded data. Particularly in conjunction with the function of matrix searching which supports the

use of tables for comparison (Gibbs, 2007), it would made the analysis more contextual, consistent and evident. Although the data set of this study was not substantially large, as a novice qualitative researcher, the use of computer assisted analysis would help me with data management, and this package would guide the analysis in a more structural and efficient way. In Bazeley's review (2009) of software packages, she pointed out that Nvivo was one of the few software packages which could be suitable for mixed methods analysis (Hemmink, Hutter and Bailey, 2011).

However, it was important to be aware of the process of qualitative analysis, the package was not used at every single step. The use of Nvivo was to assist with the data management not to rely on it completely for the data analysis, as the program itself would not do the actual analysis (Gibbs, 2007). Therefore, the following part was not the description of using Nvivo solely, but the illustration of the process of qualitative analysis which involved other means of doing data preparation, data reduction, data displaying and conclusion drawing.

Data Preparation

The data preparation for the qualitative data analysis involved three main tasks: producing a verbatim transcript of the interviews, anonymizing data and labeling data. First, all the audio recorded interviews were transcribed word-for-word including speech fillers (e.g. "you know", "I mean"), verbal gestures (e.g. "ahh", "um",) and some non-verbal signs noted during the interview such as long pause, laughs, and body language (e.g. head nodding, head shaking). There are different types of transcription for different purposes of research (Oliver, Serovich, and Mason, 2005). For example, transcriptions for conversational analysis would be required to include quite detailed norms such as the length of pause, accents and intonations, even the time interval between sentences. This is because those details serve the purpose of research with a focus of speech mechanics or linguistic issues. By contrast, the current research focused on students' perceptions and experiences, therefore the content of the interview and the meaning attached to the content was of interest rather than how they were expressed by interviewees. Besides a word-for-

word replica of the interview was produced, some non-verbal aspects of the interviewees were also written down and included in the transcription, as those non-verbal aspects were thought to be helpful interpreting the meaning of what was said. For example, in some cases, when the interviewee says "yeah" with a laugh, it could mean "no", and when there was silence but the interviewee was nodding the head, it could mean a "yes" answer in the context.

As each transcription was completed, any information that might reveal the identity of the participants in this study or the modules was removed. This was an effective way protecting the confidentiality of participants. However, after the removal, some names of people and places were re-inserted with the aim of maintaining the nature and context of the information as much as possible. For example, when a female's name in the transcription was removed, another female name was picked to be the substitute name to reflect the gender of the person involved. The names of modules involved were also re-named but within the same subject discipline. For example, if there were a module name called "Leadership and administration in Education", it would be re-named as "Educational management" or "Managing education" which could retain the subject nature of the module without revealing the identity of the particular module. The names of course programmes were maintained as they were, as they were normally very general and widely used across the country such as "BA in Education" or "Educational studies".

Lastly, when the transcript had been checked and anonymized, the transcript was labeled. In order to facilitate indexing, the label for each transcription consisted of the initials of the re-named module name, the number of the participant's questionnaire code, the year of study and the substitute name. For example, BM168_U3_Stuar meant the third year male participant from a Business and management module, and his questionnaire code is 168. All the transcripts were typed in a word document and imported into Nvivo 8. Each interview transcript was imported and saved in a separate document as an independent internal source in Nvivo.

Data Reduction

- ***Initial thematic coding***

When the data had been well prepared, the main task of data reduction was coding the data. Before coding the data, codes which were the basic elements of analysis in this study were developed by two strategies: deductive and inductive development. Codes were essentially topics, issues, ideas or opinions that had been discussed by the interviewees (Hemmink, Hutter and Bailey, 2011). Topics of the interview schedule, research questions and the 3P conceptual model were used to generate the initial codes deductively.

The initial codes as shown below were created as parent nodes in Nivo. Those initial codes were what Lofland called as "macro-level" codes (quoted in Miles and Huberman, 1994:61) in terms of the scope of data settings as well as the depth of analysis. As, at this stage, the scope of analysis was mainly focused on the general issue of entire data or entire transcription rather than the specific issue of a particular individual case. By contrast, the "micro-level" codes were those topics that focused more on the individual and more specific level. Some people also referred to them as "etic-level" codes and "emic-level" codes (Miles and Huberman, 1994:61).

As can be seen from the Table 3.4 which described the development of emerged themes from the analysis, those initial codes were the main themes in Table 3.4 which mainly derived from the research questions. The main themes created were very broad, because at this initial stage, the codes were kept as open as possible to include any possible relevant data and to allow further more specific codes to emerge from the data. Before coding, memos were kept to note any expected possible problems under the main themes in order to be kept alert in the coding. Three interview transcriptions were read line by line applying those initial "macro-level" codes to assist further development of more inductive and more "micro-level" codes.

Table 3. 4: Development of themes

Macro-level Themes	Main themes	→	Sub-themes	Additional themes
Presage Stage: student context	a. Perceptions of SIA	→	• Role of student in assessment • Value and benefits of SIA • Difficulties and challenges	• Motives of learning • Work experience • Family issues
	b. Previous experiences of SIA	→	• Within group peer assessment experiences • Group peer assessment experiences • Self assessment experiences • No prior experience of SIA	
Presage Stage: Teaching and learning context	c. Perceptions of teaching and learning environment in the module	→	• Module organization and structure • Assessment design • Quality of feedback • Quality of teaching • Teacher support • Peer support • Learning resources available	• Course information available • Peer relationship
Process Stage:	d. Engagement with SIA	→	• Engagement with feedback • Engagement with feedback giving • Engagement with peer marking • Engagement with self evaluation • Engagement with designing assessment tasks	• Reasons for choosing this module • Emotions attached to the feedback • Group working • Preference of assessment tasks
Product Stage:	e. Learning outcomes	→	• Subject knowledge • Assessment skills • Lifelong learning skills	• Self-satisfaction

During the coding of the first three transcripts, under the structure of the initial "macro-level" codes, data were reduced to segments by being coded into the four broad areas as listed in Table 3.4. During this process, it was not a solely deductive way of dividing the data into segments, but more data-driven codes were created through an interwoven process of deductive checking and inductive development of new codes.

The powerful coding function of Nvivo made this initial coding easier and quicker. After completing the initial coding in Nvivo, the previous initial parenting nodes derived from 3P model structure were developed into more advanced tree nodes with several child nodes attached under each parenting node in Nvivo as shown in Table 3.4.

- ***Refining the coding***

The initial coding was mainly carried out under the 3P model, therefore some relevant issues out with this model might have been neglected. In addition, only three transcripts were used in this initial coding stage; the codes might be limited because of the small number of data used. Therefore, another five transcriptions were used for another round of coding to refine the codes. While the coding process continued, more and more new nodes were added in Nvivo.

As can be seen in Table 3.5, two kinds of nodes were created from more data-driven codes that emerged during the coding process. One kind of code was the child nodes which were more hierarchically related to the initial main themes. The other kind was the free nodes which were found not to be strongly associated with the initial parenting nodes. Those free nodes needed to be re-checked to see if they could be sensibly organized within the 3P model structure. Secondly to explore what relationship of those free nodes with the tree nodes could be. All the developments, refinements, and thoughts in this checking process were recorded in memos.

Nvivo made data retrieval extremely easy and convenient. In Nvivo, all the coded texts were aggregated into each node with reference to folder name and location of original source. This allowed firstly, by opening a node, all the coded content under

the node to be displayed. By doing this, the consistency of the coded content under each node was checked to see if there was anything had been excluded according to the description of the node or if it was necessary to modify the node. Secondly by clicking the references of any coded content, the original coded text could easily be accessed. This allowed further examination of the context of the coded content to ensure the accuracy of the coding. By doing this, the nodes and description of nodes were gradually refined in Nvivo with the other five transcriptions. The same procedures were carried out with the rest of the transcriptions until no new codes emerged.

One of the main features of the analysis at this stage was that an enhanced hierarchical tree structure was established. As the coding activity proceeded, a large number of nodes was developed, and relationships between those nodes were also explored by circular and constant checking. It therefore made sensible and was necessary to organize those themes in a more hierarchical structure. Those hierarchical nodes structured the data to keep things tidier (Gipps, 2007). They also helped the researcher to see the broad picture of the data set in order to develop an understanding of the research problem.

Data Displaying

In the process of coding, as one form of data displaying, coding sheets were frequently used to track the development of codes as discussed above. However, by looking at those coding sheets, it was found that the analysis at the initial coding stage was more focused on the general emerging issues of the interview data, and was heavily reliant on the hierarchical coding derived from the 3P conceptual model. This kind of analysis provided the big picture but might have missed some significant “micro-level” issues.

When all interviews were coded, case summaries therefore were created to understand a more holistic picture of a more contextualized individual experience. Besides the coding sheets described above, the case summary was another form of data displaying for further in-depth analysis. The case summaries could be seen as a

"micro-level" analysis stage. Compared with the coding sheets derived from the Nvivo nodes, case summary was less visual, and could not be done by Nvivo automatically. However, the function of coding stripes from Nvivo assisted the case summary writing. Transcriptions opened in the Nivo with coding stripes on the right and the text highlighted in ochre showed exactly what was coded under each node. Due to the contextual nature of student experiences, the case summary was conducted by modules. In each module summary, three interviewees' transcriptions were chosen from each module to form the case summary. Therefore, a total of nine individual case summaries was (agrees with 'total') developed in a holistic way at the "micro-level". Table 3.5 shows the main components and structure of the case summary.

Table 3. 5: Case summaries based on modules

Module Code	**Interviewee 1 Code**	**Interviewee 2 Code**	**Interviewee 3 Code**
Module introduction			
Student's perceptions of SIA:			
• Student's views of SIA			
• Student's believes about teaching, learning and assessment			
• Student's prior experiences of SIA			
• Student's other experiences or personal circumstances			
Student's experiences in the module:			
• Student's views about the module			
• Student's views about the assessment in this module			
• Student's views about the SIA in this module			
• Student's engagement in SIA in this module			
• Student's engagement in learning in this module			

It was a process of immersion in the data, not only the interviewee's words in transcriptions were careful examined again, but also the memos, annotations and previous codes were re-checked. As shown in the table below, student's experiences of student involvement in assessment (SIA) within a particular module were described under three main aspects: the contextual factor which was related to the specific module background; the student's perceptions of SIA and the student's experiences in this particular module.

Except in the Module C where there were only three interviews, it was a decided made to choose three interviews from the rest to conduct the module case summaries. The choice of cases was based on certain criteria that had been developed during the coding stage. First of all, the individual case was selected due to its richness of data. As the interview was conducted in A semi-structured fashion, both the volume and content of the interview data differed from each other. Merriam (1998:61) emphasized Patton's (1990) information-rich cases selection for in-depth study in purposeful sampling. The information-rich cases was found to be more productive with the inductive analysis stage where the main aim was to explore and discover interesting details of particular student's experiences in the module rather than to confirm or make verification with the existing theoretical framework. Secondly, in order to have as many voices from students as possible, the selected cases reflected the interviewing sample as much as possible in terms of gender, age, and related background. Due to the complex nature of student experiences, it was not as simple as grouping them just by gender for example. There was no black and white answer in the students' experiences which would be further discussed in the discussion chapter. In other words, there was not what was called "typical" cases or "deviant" cases which should be included as suggested by Silverman (2005). Therefore, based on previous criteria, any case with distinctive interesting norms which was closely related to the research issue would be considered to be included. For example, students who had experiences of studying abroad where they experienced a completely different assessment culture.

Data Displaying and Conclusion Drawing

By conducting the case summaries based on modules, I had to return to the data to get a view of individual students in the particular module. The product of case summaries also made conclusion drawing easier and I had more confidence in the validity of the analysis. Three main methods were used to draw the conclusions: within module case and across module case comparisons, category formations, and conceptualizing.

First, the qualitative comparison did not made on the subgroups such as, gender, age or year of study. Those comparisons were more quantitative oriented. Based on the module case summaries, cases within one module were compared focusing on the personal context rather than on the module context. By doing this, reasons behind the different views, different perceptions and different interpretations experienced by students in the same module were explored. Then cases across different modules were compared again, but with focus on the module context. Although the indicators and factors of module context such as resources available or support available were much more objective than the personal context explored earlier, the effects of the module context on students' experiences were found to be different and sometimes personal. Therefore, the reason why was also sought during this comparison. Findings would be presented in the qualitative finding chapter. To conclude, the comparisons carried out focused more on the "music" rather on the "dance" itself as metaphorized by Richards (2005) who proposed focusing attention on the background context's influences on the focal issues as a strategy for analyzing data.

Secondly, categorization was the typical strategy for drawing conclusions. It involved identifying codes with similar characteristics and grouping them to form meaningful categories (Hemmink, Hutter and Bailey, 2011). Thirdly, conceptualizing involved exploring the relationships between those formed categories (Hemmink, Hutter and Bailey, 2011).

These strategies and the processes of conclusion drawing were all reflected in the

qualitative finding chapter where the main findings were presented by evidence-enhanced format using the extracts from the interviews. Table 3.6 outlines the broad picture of the qualitative finding presentation relating to the conclusion drawing.

Table 3. 6: Structure of qualitative thematic findings

Conclusion drawing	Qualitative finding presentation
Comparisons And Categorizations	**What were students' perceptions of SIA in the module?** • What were students' views of SIA in general? • What were students' views of SIA in the module
Comparisons And Categorizations	**How did the students engage with the SIA?** • Deep approach engagement with SIA • Surface approach engagement with SIA
Comparisons Categorizations And Conceptualization	**What were the main factors to influence students' SIA?** • Factors from students' personal context • Factors from the module context

3.6. Ethical Issues and Conclusion

Stake (2000, p.447) refers to the researcher entering into individuals' private worlds and as such there is a requirement that the researcher should be respectful and adhere to a strict code of ethics. Kvale (1996) outlined the three guidelines of informed consent, confidentiality and consequences when considering human research. In the whole research process, the samples and participants who were involved in the research were treated according to these guidelines.

All participation in the research project was voluntary. The research process was reviewed after each stage in the data collection in terms of research design and also in relation to ethical considerations. Before the data collection, the research aims and questions were made known to the key coordinating person and all participants in the sampling university. The participants were also told about their right to withdraw at

any time and to request more information about their participation in the research. For example, the time and places, the instruments such as the questionnaire or the interview recording.

It is important to note that the participation for the questionnaire and the interview were not necessarily anonymous; their student number and contact mail box would be identical if they wished to participate in the second phase of interviews. However, through the research process, all the identities were kept strictly confidential to researcher only. Identification was removed in data analysis and finding presentation. For academic development or research purposes, the local coordinating University would be able to receive the summery of key findings of this research if requested, but not the raw data.

Finally, it is worthwhile to note that participants for the interviews were provided with ten pound in cash as incentives and a gesture of appreciation to their time and help. The incentive was originally in the consideration of promoting more responses. Some literature discussed the issue of incentives and the money was not encouraged to be provided to the participants due to the possible influences which might be on the response of participants. However, in the interview of this study, there were quite a few students refused to accept this incentive, and all the interview participants were asked about the reason for them to participate in this interview during the informal chatting. It was found that most of them came for their interests, their willingness to help, or their desire to express their views.

This chapter described details of how this research was designed and carried out. It mainly articulated the process of three stages in this research: decision making in the design stage, the process of data collection, and the process of data analysis. The duality of this research could be described as the characteristic of this research.

CHAPTER 4 FINDINGS FROM ETLAQ INVENTORY DATA

4.1. Introduction

In the last chapter, the research question and research design were introduced, together with the data collection and data analysis processes. It was clear to see that this research consisted of two phases of data collection and analysis. The first phase was the quantitative research based on the inventory. The overall process of quantitative data analysis on the inventory data had been outlined in the previous chapter, and this chapter presents the main findings from the quantitative data analysis. There were four main sets of questions in the questionnaire. The first set were questions about students' approaches to studying, and second set were questions about students' perceptions of the teaching, learning and assessment environment (TLAE) on the module. Those two sets of questions were adopted from the inventory derived from the ETL project. The third set of questions asked about students' satisfaction with the module, and the last set were questions about some background information of participants. This chapter outlines a broad picture of students' perceptions of being involved in assessment, and also suggests the answer to the second research question of the main factors to influence students' involvement in assessment.

This chapter is organized by the three main steps of the quantitative analysis. Firstly and most importantly was to investigate the underlying structure of the inventory by using factor analysis techniques. After the basic structure has been established, the second step was to examine the group differences under such structure. Then the last step was to explore the relationships between the subscales in the inventory. The findings are presented in the three steps while the specific analysis techniques are explained in the respective sections.

4.2. Descriptive data

Before going into the further details of analysis in each step, it is worthwhile to look at the overall data that have been collected. There were in total 250 valid questionnaires received from around 700 students who were sent the questionnaire coming from three different Business and Management undergraduate modules. The return rate was about 36%. Table 4.1 below describes where and how much the valid data come from.

Table 4. 1: Numbers of respondents and return rate in questionnaire survey

	Valid Questionnaires	Total No. Of Students	Return rate	Percentage
Module A	158	170	92%	64%
Module B	77	500	15%	30%
Module C	15	30	50%	6%
Total	250	700	36%	100%

The highest return rate was obtained from module A where the questionnaires were distributed in the class and collected in the class. By contrast, the lowest return rate was from module B where the questionnaires were distributed by email requests. The advantage of physical distribution was obvious from Table 4.1 above, and the related methodological issue has been discussed in Chapter 3.

Figure 4.1 below summarizes the questionnaire respondents' background information by modules. Six questions regarding students' backgrounds were asked in the questionnaire, and they were gender, age, year of study, mode of study (part-time or full-time studying), year of entry to university, parents' higher education background. Bearing in mind the characteristics of the three modules as introduced in Chapter 3, it is important to note that module A was mainly taken by lower year students, module B was a third year module, and module C was a fourth year module. Most of the students were aged from 19 to 20. Also from Figure 4.1, it can be seen that most of the students were direct entry students starting their study at the university from the

first year and full time. However, from the data shown in Figure 4.1, more female students responded to the questionnaire survey than male students; while only one third of students had a parent or guardian who had participated in higher education. It was not possible to conclude whether there were more female students in the module or in the university where I conducted this study or female students were more likely to be involved in assisting researchers.

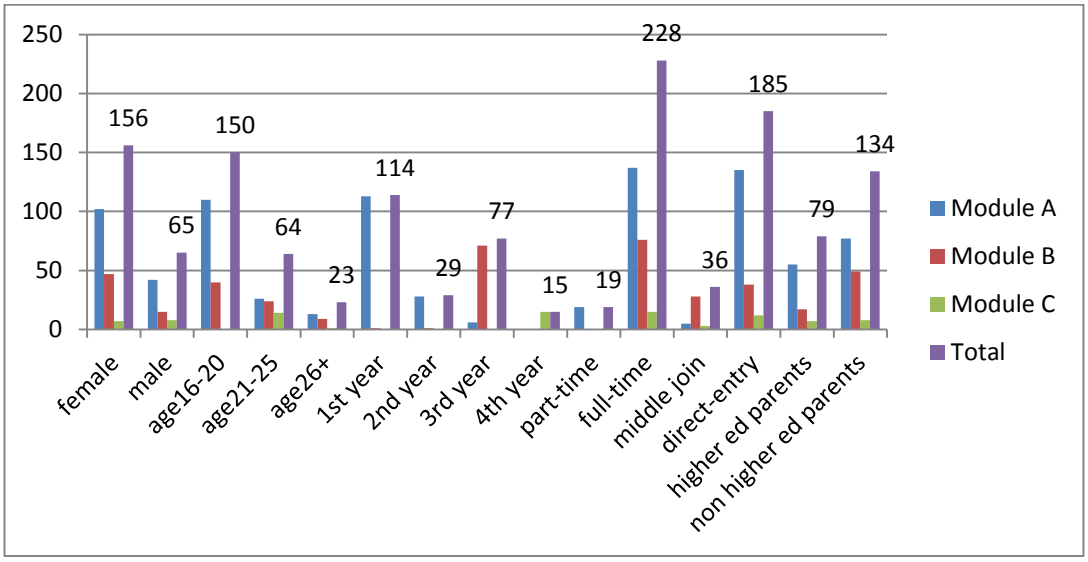

Figure 4. 1: Questionnaire respondents' background information by modules

4.3. Underlying structure of the inventory

This section is mainly to investigate the underlying structure of part one (students' approaches to learning and studying) and part two (students' perceptions of the teaching, learning and assessment environment) in the questionnaire. The analysis technique involved is mainly factor analysis which is appropriate for assessing the structure of such inventories. It has been one of the most widely used statistical procedures in social research when the research aims to identify a set of latent constructs underlying a battery of measured variables (Pallant, 2005). Firstly, the suitability of the data for factor analysis is assessed. Then the choice of specific factor analysis techniques is justified. Finally the findings from the chosen factor analysis of the two parts are presented respectively.

4.3.1. Assumption checking and choice of factor analysis

Firstly, the general recommendation on the issue of sample size for factor analysis is the larger, the better (Pallant, 2005), and the other common rule is at least 10-15 participants per variable (Field, 2009). However the participants-to-variable ratios are found to have little effects on the stability of factor solutions in Arrindell and van der Ende's empirical research as reported by Field (2009). While many researchers (Fidell, 2007; Comrey and Lee, 1992; Kass and Tinsley, 1979 as quoted in Field, 2009) including Field recommended having at least 300 cases as a good sample size for factor analysis. More recently, different criteria and measurements on the efficient sample size for carrying out factor analysis have been argued for. Based on various researchers' work, Field (2009) has concluded three other ways to measure the efficient sample size. The first method is to look at the factor loadings suggested by Guadagnoli and Velicer (1988) according to Field. They argue that if a factor has four or more loadings greater than 0.6 then it is reliable regardless of sample size, and a factor with ten or more loadings greater than 0.40 are reliable if the sample size is greater than 150, otherwise, the sample size should be at least 300. The second method is advocated by MacCallum, Widaman, Zhang and Hong in 1999 according to Field's summary. They argue that as communalities become lower the importance of sample size increases. According to their findings, they suggest with communalities in the 0.5 range, samples between 100 and 200 can be good enough for factor analysis. The third method noted by Field is the use of Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) originally found by Kaiser in 1970. The higher KMO value is the better. Kaiser recommends the bare minimum value should be greater than 0.5, and many other textbooks also suggest 0.6 as minimum value for a good factor analysis (Tabachnick & Fidell, 2001; Pallant, 2005). There were total of 251 valid questionnaires collected, and it was considered a comparatively speaking adequate sample size. Correlations were checked among the 22 items in part I and 38 items in part II respectively. The inspection of the both correlation matrixes revealed the presence of many coefficients of .3 and above, except the the coefficent value from item 20 in part I. The KMO values were checked from the

factor analysis as well. The KMO value for part I was .842 and for part II was .840 respectively.

Secondly, and most importantly is the normality testing before the factor analysis. Normality of distributions is the argued as the most important assumption in order to to generalize the results of the analysis beyond the sample collected (Field, 2009). Both Kolmogorov-Smirmov (KS) values and histogram graphs were checked for each variable, and the skewness and peakedness were check as well. It was found there was a comparatively skewed shape with relatively flat distribution in the data. However, most of the SPSS techniques used in this study were robust in terms of skewness and peakedness. Those inspection showed violation to the assumption of normality for most of the variables in my data set, and this issue was taken into consideration when choosing the method of factor analysis as discussed later.

Lastly, checking the outlier and missing data is necessary. The descriptive table obtained from SPSS indicated for most of the variable, the mean and 5% trimmed mean were similar ranging within 0.06. For the missing data, there were a few missing values randomly found, and 'Exclude cases pairwise' option was always adopted to exclude the case only if there were missing data required for the specific analysis.

After the testing for the suitability of factor analysis, two main factor analysis methods were involved in investigating the underlying structure of part I and part II of the ETLA questionnaire. One is the maximum likelihood factor analysis (ML) which was thought to be the best choice for identifying a sophisticated latent structure (Fabrigar et al., 1999; Costello and Osborne, 2005). However, the limitation of ML is its assumption of normality, which would result in distorted findings if this assumption is severely violated (Fabrigar et al., 1999; Costello and Osborne, 2005; Field, 2009). There has been no agreement to what extent should be accounted as severe violation or mild violation. As the sig values of both KS and SW (Shapiro-Wilk) for all of the variables in the data set were .000, considering the validity of results, the other method, principal axis factor (PAF) analysis was chosen to be

carried out for the exploratory stage. PAF was claimed to be the best alternative factor analysis for non-normal data; however this method produces less range of goodness-of-fit indexes and is not able to compute the confidence intervals and significance tests (Fabrigar et al., 1999).

These two methods have their own advantages and disadvantages, so during the analysis, PAF and ML were both tried in the exploratory stage, and it was found that both factor analysis techniques produced similar overall structure with few different items loading. Therefore, PAF was carried out firstly to explore the different number of retained factors solution, then in the later stage when the number of retained factors was identified, ML was also carried out for confirmatory purpose to compare the structure. However, comparing the results produced by the two factor analysis techniques, the structure generated by PAF was found to be easier to interpret. Due to the consideration of validity of non-normal nature of the data set, findings reported in the next two sessions were based on the PAF analysis.

4.3.2. Structure of students' approaches to learning and studying

The first part of the questionnaire is about students' approaches to studying in the specific modules. As introduced in the last chapter, there were 22 items in total coming from four original scales which are: deep approach, surface approach, monitoring studying and effort management. All of the 22 items were included in the PAF analysis. With regard to the number of factors to abstract, Eigenvalues, Scree tests and Parallel analysis were adopted (Tabachnik and Fidell 1996) to justify the decision. The Eigenvalues suggested that a 5-factor solution was appropriate, since there were five factors with Eigenvalues greater than 1. The Scree test suggested that it was better to extract either 3 or 5 factors. However, Parallel analysis technique was used to check the correct factor numbers. Parallel analysis is now often recommended as the most accurate (Pallant, 2005) and the best method to assess the true number of factors (Lance, Butts, and Michels, 2006, Garson, 2009). Table 4.2 shows that the parallel analysis suggests that two factors should be retained.

Table 4. 2: Comparison of eigenvalues from PAF and the corresponding criterion values obtained from parallel analysis

Component number	Actual eigenvalue From ML	Criterion value from Parallel analysis	Decision
1	5.227	1.5642	**Accept**
2	2.003	1.4730	**Accept**
3	1.339	1.4024	**Reject**
4	1.244	1.3407	**Reject**

The Parallel analysis seemed to support the two-factor solution. However, according to the 'Comprehensibility' principle, the final decision should not rely solely on a single statistical criterion. The researcher has to make a judgment to select the solution which generates the most comprehensible factor structure and most interpretable factors.

Different numbers of retained factors were tried with Direct Oblimin rotation, from five retained factors to two retained factors. Comparing those different solutions, it was found that items from original surface approach scale were always staying together as an identical factor. In the five factor solution, one of the factors was dominated by only two items, which might be difficult to make the scale meaningful. Whereas the two factor solution, four items (5, 8, 13, 7) were stayed together referring to the 'Surface approach' in the original inventory; everything else were brought into one broad category which related to the 'Deep approach'. It showed the strong relation of the 'deep approach' items with both 'monitoring studying' items and 'effort management' items. This tied in with previous research findings where the positive correlation between the 'Deep approach' and 'Monitoring Studying' was found (Xu, 2006). Although the structure generated from the two-factor solution seemed rather clean, it was found that too many items were loading on one factor. This structure was also found to be too simple and might consequently be at the risk of losing the latent factors.

Compared with the factor solutions discussed above, both the three and four factor solutions appeared reasonable and quite similar to each other. The difference was

the three-factor solution which combined the original ‘effort management’ scale with the original ‘deep approach’ and ‘monitoring studying’ scales, while in the four-factor solution, items from the original ‘effort management’ scale and item 21 (“Before I could understand a new topic, I’ve often had to commit key terms and details to memory.”) were maintained as one identical factor. The four-factor solution, explaining 45.5 percent of the variance, appeared to be a better solution, as it solved the problem of too many items loading onto one particular factor. It was both conceptually interpretable and empirically found that the four-factor solution had the advantage of relating to an element that appeared in the interview data.

As can be seen in the data obtained from the pattern matrix with four-factor solution shown in Table 4.3, the item loading was clean and tight, with the exception of item 19 which was excluded in the analysis because of its low loading (any loading below 0.30 was omitted). By looking at the specific items that fell into each factor, it was found that each group represented something in common as a whole but unique and different from the other three groups. Items (4, 6, 9, 10, 12, 14, 16, 18, 22) that loaded on Factor I included most of items from the ‘Deep approach’ scale, and the ‘Monitoring studying’ scale in the original inventory. Factor II brought all the items from the ‘Surface approach’ scale in the original inventory together. High loadings on Factor III were item 1, 2, 3, and 7. Except for item 7, all other three items (1, 2, 3) appeared to be related to seeking understanding and meaning in the study, while item 7 was found to be loading on both factor III and IV. As item 7 was originally designed to be in the ‘effort management’ scale, and previous research confirmed the correlations among the original sub-scales, it would be sensible to acknowledge the cross loading of item7 and include it into factor IV which was more closed to the original scale design. The items from the original ‘effort management’ scale and other two items (20 and 21) were loaded on one factor that represents the effective study management skills such as time management, effort management skills (item 7, 11 and 15), collaborating skills (item 20), and memory skills (item 21).

Table 4. 3: PAF analysis of questionnaire Part I

Original	Sub-scales	Items	Factors			
KMO	.831		I	II	III	IV
Deep Approach	Intention to understand For oneself	3. I have usually set out to understand for myself the meaning of what we had to learn.			.460	
		16. In reading for this course unit, I've tried to find out for myself exactly what the author means.	.509			
	Relating ideas	6. In making sense of new ideas, I have often related them to practical or real life contexts.	.325			
	Use of evidence	12. It has been important for me to follow the argument, or to see the reasons behind things.	.387			
		9. I've looked at evidence carefully to reach my own conclusions about what I'm studying.	.550			
	Memorising with	21. Before I could understand a new topic, I've often had to commit key terms and details to memory.				.389
	Understanding	1. When I've been preparing for coursework, I've focused on understanding the material so that I won't forget it.			.517	
Surface Approach						
	Memorising without understanding	8. Whenever possible, I've just memorised what has been taught without trying to understand it.		.639		
		13. Whether I've understood has mattered less than getting what we're studying firmly fixed in my memory.		.514		
	Fragmented knowledge	5. Much of what I've learned in this course seems no more than unrelated bits and pieces in my mind.		.434		
	Unthinking acceptance	17. I don't think through topics for myself, I just rely on what we're taught.		.620		
Monitoring Studying						
	Monitoring study effectiveness	4. In order to keep my work well focused, I've thought about what I want to get out of this module.	.385			
		22. This module has encouraged me to give more consideration to the quality of my work.	.496			
	Monitoring understanding	18. If I've not understood things well enough when studying, I've tried a different approach.	.324			
		2. I've been over the work I've been done to check my reasoning and see that it makes sense.			.552	
	Monitoring generic skills	10. When I've been communicating ideas, I've thought over how well I've got my points across.	.447			
		14. I've tried to find better ways of tracking down relevant information in this subject.	.619			
		20. I found I could generally work comfortably with the other students on this Module.				.372
Effort Management						
		7. On the whole, I've been quite systematic and organised in my studying.			.456	.409
		11. I've organized my study time carefully to make the best use of it.				.532
		15. Whatever I've worked on, I've generally pushed myself to make a good job of it.				.449
		19. When I find something boring, I can usually force myself to keep focused.	-----	-----	-----	-----

Finally, in order to ensure that the solution was appropriate, the scale reliability was conducted with the newly formed factors to evaluate the strength of the internal consistency. Table 4.4 showed the Cronbach's alpha values of the four-factor solution with item 19 removed. The 'Deep approach' scale had a higher score than the other three newly formed scales. It is often suggested that the Cronbach's alpha value of .7 or above is an acceptable value indicating sufficient consistency of the scales (Pallant, 2005; Field, 2009). However, it has to be remembered that this value depends on the number of items on the scale. Pallant (2005) pointed out that it would be common to find scales with fewer than ten items which had Cronbach's alpha value of less than .5. For all the newly formed scales, the first scale (Deep approach) had nine items, and the others had even fewer. Therefore, it was reasonable to attribute the low alpha values for the other three scales to the small number of items they included. In this regard, it would be inappropriate to reject the internal consistency assumption of these three scales because their alpha values were less than 0.7. A similar problem has also been found in other studies (e.g., Xu, 2005) when the inventory was revised and adopted into different contexts.

Table 4. 4: Scale reliability of part I

Newly formed scales		Cronbach's alphas
I.	Deep approach	**.787**
II.	Surface approach	**.625**
III.	Seeking meaning and understanding	**.634**
IV.	Effective study management	**.619**

Table 4. 5: Factor Correlation Matrix

Factor	I	II	III	IV
I	1.000	-.098	.414	.455
II	-.098	1.000	-.161	-.105
III	.414	-.161	1.000	.294
IV	.455	-.105	.294	1.000

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

From Table 4.5, ‘deep approach’ clearly had a positive relationship with both ‘seeking meaning and understanding’ and ‘effective study organisation’, which confirmed what had been found in previous research (Entwistle, McCune and Hounsell, 2003; Hounsell and Hounsell, 2006). By contrast, ‘surface approach’ had minor negative correlation with the other three scales.

4.3.3. Structure of students’ perceptions of the teaching, learning and assessment environment

The same procedure was carried out for part II of the questionnaire. The PAF analysis with Oblimin rotation was conducted with different numbers of retained factors on the 38 items. The KMO values were all above .8. It was difficult to see a clear inflexion on the screeplot, as the line was rather flat after the second point, as shown in Figure 4.2. After the exploratory PAF, a seven-factor solution explaining 58% of the variance was obtained. Table 4.6 showed the factor loading after the Direct Oblimin ration. ML was carried out with seven retained factors and Direct oblimin ration, the structure was found to be similar to the PAF. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this solution, KMO= .838.

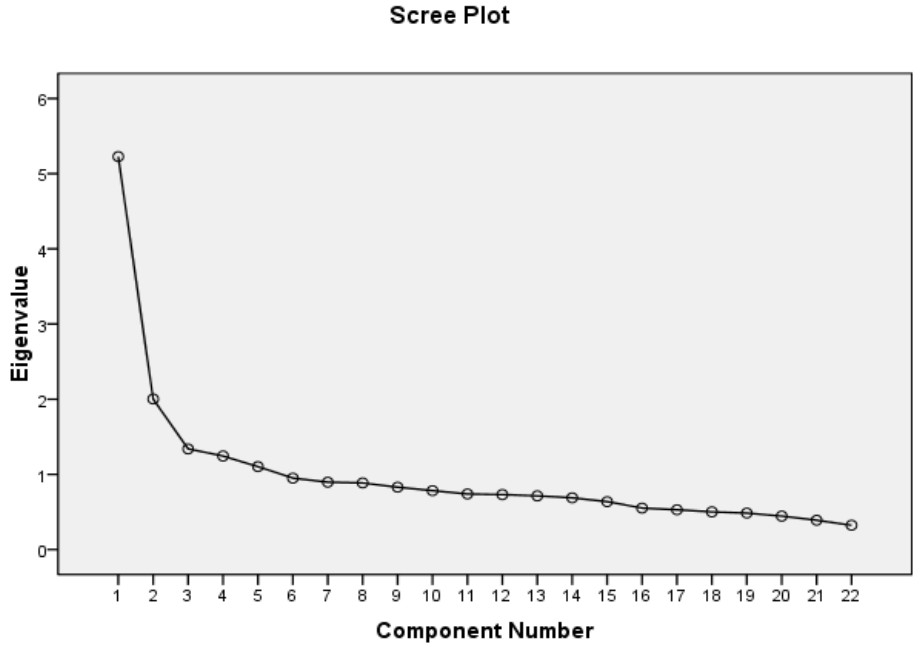

Figure 4. 2: Screeplot of factors of questionnaire Part II

In this section, rather than repeating the procedure of analysis, the meaning of each factor was considered to make better sense of the grouping of items surveyed. As in the qualitative research stage, those factors were the main references for the interviewing. These aspects were also discussed in interviews with students, and related qualitative findings were presented in later chapters.

Table 4. 6: PAF analysis of questionnaire Part II

Original Scales		Items	Factors (KMO: .836)						
			I	II	III	IV	V	VI	VII
Organisation	1	It was clear to me what I was supposed to learn on this Module.					-.517		
& structure	2	The topics seemed to follow each other in a way that made sense to me.					-.732		
	3	How this Module was taught fitted in well with what were supposed to learn.					-.814		
	4	I could see how the set work fitted in with what we were supposed to learn.					-.834		
	5	The handouts and other materials we were given helped me to understand this module unit.		.405					
	6	The different types of teaching (lectures, tutorials, seminars, etc.) supported each other well.		.457					
Teaching for	7	Plenty of examples and illustrations were given to help us to grasp things better.		.406					
Quality learning	8	On this Module, I was prompted to think about how well I was learning and how I might improve.	-.374						
	9	This Module encouraged me to relate what I learned to issues in the wider world.	-.509						
	10	We were encouraged to look for links between this Module and other Modules.	-.539						
	11	The teaching on this Module helped me to think about the evidence underpinning different views.	-.445						
Learning support	12	Staff has tried to share their enthusiasm about the subject with us.		.648					
	13	Staff has been patient in explaining things which seemed difficult to grasp.		.776					
	14	Students' views have been valued on this Module unit.	-.410						
	15	Students supported each other and tried to give help when it was needed.						.713	
	16	Talking with other students has helped me to develop my understanding.						.707	
Choice	17	We were allowed some choice over what aspects of the subject to concentrate on.	.646						
	18	This Module provided plenty of opportunities for me to discuss important ideas.	.679						
	19	In this Module, there has been time for me to explore in more depth aspects which particularly interested me.	.496						
Assessment	20	You have really to understand the subject to get good marks in this Module.							.324
	21	Doing the course work has helped me to make connections between existing knowledge and my experience.						.261	.235
	22	To do well in this Module, you had to think critically about the topics.							.326

	23	I expect the mark I get will be a good reflection of how well I understand the course material.		.406				
	24	It was clear to me what was expected in the assessed work for this Module.		.401				
Feedback	25	I received detailed comments on my work.			.700			
	26	The feedback was given quickly enough to be useful.			.747			
	27	The teacher's feedback on my work has helped to clarify things I hadn't fully understood.			.777			
	28	The feedback given on my work from my fellow students has helped me to improve my ways of learning and studying.			.375			
	29	I usually understand the feedback comments being given on this Module.			.620			
	30	It's as important for me to pay attention to the comments as to the grade.						.379
	31	I paid careful attention to any advice or feedback I was given, and tried to improve my understanding.						.447
	32	If I were puzzled by the feedback given, I would ask for help.						.458
Involvement in	33	We have had opportunities to practice the kinds of problems on which we will be formally assessed.		.317				
assessment	34	Marking on other's work really helped me to understand what good work for this Module looks like.				.735		
	35	Giving feedback to others really helped me understand the course material better.				.834		
	36	Being assessed on a project I've designed has made me feel more committed to my studies.				.666		
	37	I believe that the students can take some responsibility for deciding what makes for high quality work.				.470		
	38	In my view, students have a valuable role to play in the marking process.				.511		
			I	II	III	IV	V	VI	VII

The items that loaded on the first factor suggested the possible opportunities for quality learning. As seen from the item key in Table 4.6, it included three main kinds of learning opportunity. One kind was based on items 8, 9, 10, and 11 about opportunities for critical thinking and relating to learning; another kind represented by items 17, 18, and 19 was the opportunity for choice and autonomy in learning either in learning content or learning depth; and the final kind of opportunity was reflected by item 14 which focused on students' views. In other words, there should be an opportunity for students to express their own views on learning. These three kinds of opportunities were found to be critical for students' quality learning. In other words, to students, quality learning or meaningful learning could be achieved if there were opportunities to think critically and relate, to choose their own learning content, and to have developed their own views.

The second factor represented the learning support available to students. This learning support included learning materials (item 5) and teaching support (items 6, 7) aligned assessment practice (items 23, 24, 33), and positive supporting attitudes from staff (items 12, 13).

Items loading on the third factor are associated with the quality of received feedback, and they included the timeliness of feedback (item 26), volume of feedback (item 25), clarity and ease of understanding of feedback (items 27, 29), and helpfulness of feedback (items 28).

The fourth factor included items about students' experiences and views about involvement in assessment. For example, items 34 and 35 were about peer feedback giving and peer-marking; item 36 was about self-designed assessment.

The fifth factor consisted of four items (items 1, 2, 3, 4) about aligned module organization and structure. It concerned mainly the module organization by which students could learn in a clear and aligned structure.

Table 4. 7: Parallel analysis of questionnaire Part II

Component number	Actual eigenvalue From ML	Criterion value from Parallel analysis	Decision
1	1.8083	9.939	**Accept**
2	1.7158	3.483	**Accept**
3	1.6452	2.341	**Accept**
4	1.5811	1.906	**Accept**
5	1.5231	1.803	**Accept**
6	1.4663	1.564	**Accept**
7	1.4158	1.244	**Reject**

The Parallel analysis suggested a six-factor solution (as seen in Table 4.7), probably because there were only two items loading on the sixth factor. However items 15 and 16 clearly indicated that the common theme was that of student peer support, and both factor loading and scale Cronbach's alphas were very high. Both seven-factor and six-factor solution without items 15 and 16 did not result in a better structure; therefore it was decided to retain items 15 and 16 for the seven-factor solution analysis. In addition, this theme, suggested by item 15 and 16, was confirmed to be a valuable element for students from the interview data analyzed in the next chapter.

The seventh factor was about how to do well in assessment in the module. Items 20, 21 and 22 were about what needed to be done before the assessment in order to do well in this module; and items 30, 31 and 32 were about what needed to be done after assessment.

Table 4. 8: Scale reliability of questionnaire Part II

Newly formed scales	**Cronbach's alphas**
Factor I. opportunities for quality learning	**.852**
Factor II. learning supports available	**.799**
Factor III. quality of received feedback	**.859**
Factor IV. students' experiences and views about SIA	**.843**
Factor V. clear aims and curricular alignment	**.813**
Factor VI. student peer support in learning	**.709**
Factor VII. how to do well in assessment in the module	**.609**

Overall the data showed a fairly clear structure in this part with satisfactory scale consistency. The high Cronbach's alpha values in Table 4.8 supported the decisions discussed above and confirmed this conclusion.

Table 4. 9: Factor Correlation Matrix of questionnaire part II

Factor	I	II	III	IV	V	VI	VII
I	1.000	.118	.247	.297	-.118	.158	.086
II	.118	1.000	.135	.190	-.479	.280	.211
III	.247	.135	1.000	.282	-.205	.221	.248
IV	.297	.190	.282	1.000	-.314	.297	.226
V	-.118	-.479	-.205	-.314	1.000	-.246	-.086
VI	.158	.280	.221	.297	-.246	1.000	.136
VII	.086	.211	.248	.226	-.086	.136	1.000

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

Table 4.9 shows the relationships among between the seven factors. In general, there were mild relationships among between the seven factors, while factor V (the clear aim and curricular alignment) was the only one that negatively correlated with other factors.

4.4. Exploration of relationships

As mentioned before, in the questionnaire, except for the background information, there were three sets of self-reported Lickert style questions. The third set of questions (in the questionnaire part III) were designed to measure students' overall satisfaction with eight aspects of the module: 1, designed SIA (student involvement in assessment) activity; 2, the way the module is taught; 3, the way the module is assessed; 4, the knowledge acquired; 5, critical thinking ability developed on this module; 6, interpersonal skills gained on this module; 7, self-regulation and management skills gained on this module; 8, other transferable skills such as IT skills and presentation skills learned on this module.

The main purpose of this section was to explore the relationships between students' approach to study, their perceptions of the teaching, learning and assessment environment, and their satisfaction on this module. Two main techniques were involved in the relationship analysis at this stage: correlation and PAF. The analysis was carried out at the newly formed scale level.

Table 4. 10: Correlation coefficients between scales of part III and scales of other two parts (I and II) in the questionnaire

	Sat 1	Sat 2	Sat 3	Sat 4	Sat 5	Sat 6	Sat 7	Sat 8
I-I	.266**	.288**	.291**	.388**	.415**	.357**	.347**	.410**
I-II	-.022	-.149*	-.066	-.22**	-0.37	-.103	-.24**	-.128
I-III	.183**	.336**	.193**	.397**	.290**	.244**	.353**	.299**
I-IV	.175**	.256**	.250**	.355**	.210**	.257**	.436**	.275**
II-I	.313**	.405**	.327**	.358**	.455**	.438**	.382**	457**
II-II	.066	.436**	.500**	.392**	.131**	.109	.293**	.136*
II-III	.293**	.395**	.428**	.258**	.379**	.296**	.297**	.380**
II-IV	.419**	.326**	.295**	.374**	.526**	.394**	.315**	.506**
II-V	.126	.386**	.481**	.426**	.177**	.105	.370**	.157*
II-VI	.099	.143**	.231**	.161**	.170**	.284**	.199**	.173**
II-VII	.171**	.294**	.364**	.295**	.312**	.225**	.325**	.285**

**. Correlation is significant at the 0.01 level; *. Correlation is significant at the 0.05 level.

I-I. Deep approach
I-II. Surface approach
I-III. Seeking meaning and understanding
I-IV. Effective study management

II-I. Opportunities for quality learning
II-II. Learning supports available
II-III. Quality of received feedback
II-IV. Students' experiences and views about SIA
II-V. Clear aims and curricular alignment
II-VI. Student peer support in learning
II-VII. How to do well in assessment in the module

Table 4.10 displays the correlation coefficients of four scales from part I with students' approaches to studying, seven scales from part II relating to students' perceptions of the teaching, learning and assessment environment, and their satisfaction with this module. Firstly, it was found that there were two scales: surface approach and peer-support had very low correlations with students' satisfaction scale. Secondly, the scale of opportunities for quality learning and the scale of students'

experiences in SIA were found to be associated with almost every aspect of students' satisfaction with the module studied. Then deep approach scale was the next scale which showed a strong relationship to students' satisfaction with the module studied. The pattern shown here in Table 4.10 might indicate on the one hand, that students who adopted surface approach to study on the module might not care about how they were benefitting from the module. By contrast, students who adopted a deep approach to their studies were more likely to be satisfied by studying the module especially on aspects 4, 5, 6, 7, and 8. On the other hand, the message emerging from Table 4.10 suggests that the module which provided more and better opportunities for quality learning, and the module in which students had positive experiences in SIA, would be more likely to gain the satisfaction of the students. However, peer support in study was not considered to be a significant element for students' satisfaction on the studied module. In other words, students might not consider peer support as part of the teaching, learning and assessment environment.

The next question is to explore the relationship between students' approach to study and their perceptions of the teaching, learning and assessment environment by looking more closely at the correlations. Therefore a simplified correlation table which only includes the newly formed scales from the two parts would be useful, as shown below in Table 4.11.

Table 4. 11: Correlation coefficients between scales in part I and II

	Deep	Surface	Understand	Management
II-I	.620**	-.159*	.378**	.338**
II-II	.289**	.038	.380**	.312**
II-III	.311**	.054	.229**	.203**
II-IV	.489**	-.032	.336**	.325**
II-V	.274**	-.154*	.412**	.238**
II-VI	.308**	.043	.130*	.279**
II-VII	.395**	-.145*	.284**	.328**

**. Correlation is significant at the 0.01 level; *. Correlation is significant at the 0.05 level

II-I. Opportunities for quality learning
II-II. Learning supports available
II-III. Quality of received feedback
II-IV. Students' experiences and views about SIA
II-V. Clear aims and curricular alignment
II-VI. Student peer support in learning
II-VII. How to do well in assessment in the module

From Table 4.11, the weak relationship was found again between the surface approach to study scale and other TLA scales. Deep approach to study was found to be strongly associated with opportunities for quality learning provided on the module. Other than this, the quality of feedback, experiences of SIA, peer support and how to do assessment well were also found to be closely related to the adoption of a deep approach to study. The other two scales of study approach were generally found to be correlated with opportunities provided for quality learning, learning support available in study, and experiences in SIA. Module structure was found to be particularly important for understanding the meaning in studying on the module, while assessment requirements were found to be related to study management skills. Compared with the patterns found in the earlier Table 4.10, it was, interestingly, found that 'peer support' actually contributed in some way to deep approaches to study.

4.5. Group Differences

As indicated at the beginning of this chapter, the respondents were from three different Business and Management modules, studying in different years with different personal backgrounds. In this section, group differences of respondents' responses on the three parts (four scales of 'students' approaches to studying', the seven scales of 'students' perceptions of the teaching, learning and assessment environment', and eight scales of 'students' satisfaction with the modules) in the questionnaire were examined by the technique of comparing group differences in SPSS. The different groups were defined by the information provided by the fourth part of the questionnaire, and they were gender, age, module studied module, year of study, year of entry, study mode (full-time or part-time student), and parents' higher education background.

With regards to the assumptions of normality, as noted before, this data set was found not to be normally distributed, therefore the non-parametric techniques were used firstly to detect any group differences. However, compared with parametric techniques, the non-parametric techniques provide limited information and are less

powerful in detecting the group differences. As most of the parametric techniques for comparing the groups are claimed to be reasonably robust to this assumption with good sample size (Pallant, 2005), it was decided to employ some of the parametric techniques to further explore the group differences. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Except the normality, other assumptions were noted with no serious violations. From previous relationship analysis, it was known that most of the scales within each part of questions from the questionnaire were moderately correlated, multivariate analyses of variance (MANOVA) were carried out to check with the findings derived from the non-parametric tests. Then univariate ANOVA analyses were carried out to follow up the MANOVA on the same scales with those groups which showed significant differences (Field, 2009). There were two purposes behind using ANOVA as the follow-up up test. Firstly, in order to compare findings derived from both non-parametric tests and parametric tests, ANOVA between groups with post-hoc tests was used to produce the parametric findings when MANOVA assumptions were found to be violated and could not be used. As the mild correlation between the scales, the Bonferroni adjustment, was used both to get more stringent alpha values which should reduce Type 1 errors, and secondly, to find out where the significant differences would lie, and according to what characteristics those differences would be generated.

When the MANOVA was not eligible to use in some scales, both non-parametric tests and ANOVA tests with the Bonferroni adjustment were carried out, and the findings were compared and justified by looking at the effect size and actual mean differences. According to Cohen's classification on effect size, .01 to .05 is a small effect, .06 to .13 is a medium effect, and .14 or above is a large effect (Pallant, 2005). In general, in this chapter, any detected significant difference was not reported if its effect size was below .06. However, statistics should not be relied upon solely, as the sig. values are sensitive to the sample size and other factors, the actual difference in mean scores of the groups should always be noted as an additional source of justification. The group differences reported below were the findings justified by

three criteria (alpha values, effect size, and actual difference in mean scores) that had been outlined above.

By comparing the data derived from three of the techniques, significant differences detected from MANOVA were confirmed by the ANOVA with the Bonferroni adjustment, while more significant differences were found from the non-parametric techniques. This is probably because the non-parametric techniques were not able to reflect the correlations of dependent variables in the data. Those differences derived from the non-parametric techniques were found evident in ANOVA tests without the Bonfrroni adjustment. In other words, ANOVA tests without stringent alpha value produced similar results with non-parametric tests with more group differences detected than the MANOVA and ANOVA tests with more stringent alpha value.

4.5.1. Differences in age groups

In the background information section, participants were asked about their age ranges. Students were grouped by three different ranges of age from 16 to 20, from 21 to 25, and 26 and above. Generally speaking, most students who had just finished their schooling and started their first year would be aged 17 or 18, and would either 21 or 22 years old in the last year of university study. Students from age 26 or above were accounted as mature students who would not have joined the university directly from school. Most of the surveys concerning the ages of participants have used these dividing points.

Kruskal Wallis Tests and MANOVA tests were performed to investigate age differences in the three parts of the questionnaires. There were statistically significant differences among the responses from the three different age groups only in the case of 'students' approaches to studying': F (8, 406)=3.82, p=.000, Wilks'Lambda=.87, partial eta squared=.07. When the results for the four scales of 'students' approaches to studying' were considered separately, the only detected difference to reach statistical significance, using a Bonferroni adjusted alpha level of .012, was found in the 'surface approach': F (2, 206)=7.12, p=.001, partial eta

squared=.07. Then one-way ANOVA findings confirmed the difference stated above, and post-hoc comparisons using the Tukey HSD test showed that the mean score for groups of age 16-20 (M=3.19, SD=.68) was significantly different from both groups of age 21-25 (M=2.87, SD=.76) and groups of age 26 or above (M=2.67, SD=.88). However, there was no significant difference found between those aged 15 to 21 and those aged 26 or above.

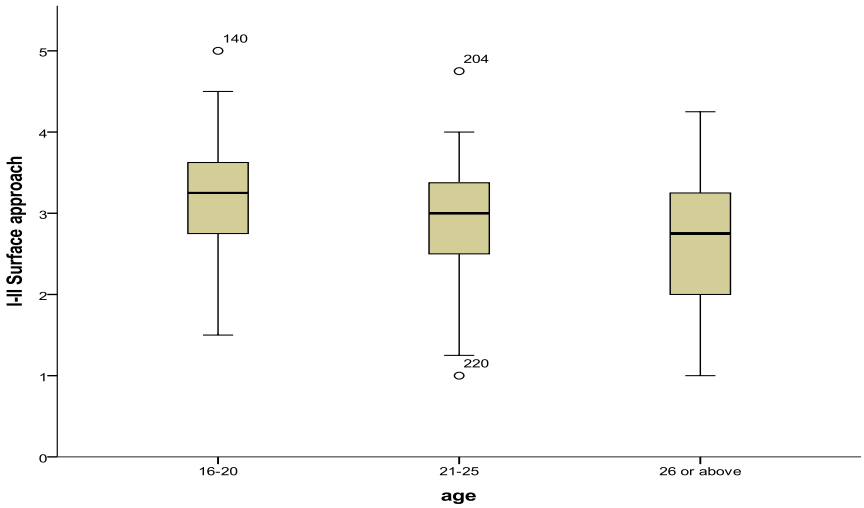

Figure 4. 3: Boxplot of age groups on surface approach score

Figure 4.3 shows the surface approach scores for different age groups, and it suggests that the younger age students especially those aged 16-20 were more likely to take a surface approach in their study.

4.5.2. Differences in module groups

Part I students' approaches to studying

As described in earlier chapters, the data were collected from three different modules (modules A, B, and C). The same process of analysis was carried out, as with the first set of the questionnaire items, and statistically significant differences among the responses from the three different module groups were found on 'students' approaches to studying': F (8, 422)=6.34, p=.00, Wilks'Lambda=.80, partial eta squared=.11. When the results for the four scales of 'students' approaches to studying' were considered separately, using a Bonferroni adjusted alpha level of .012, significant differences were found in 'deep approach': F (2, 214)=7.81, p=.001,

partial eta squared=.07; and in 'seeking meaning', F (2, 214)=9.63, p=.000, partial eta squared=.08.

Then one-way ANOVA findings confirmed the difference stated above, and post-hoc comparisons using the Tukey HSD test showed that students' mean score of the 'deep approach' only significantly differed between module A (M=3.28, SD=.61) and module B (M=3.65, SD=.60). The students' mean score of 'deep approach' in module C (M=3.49, SD=.63) lies midway between module A and module B, but was not significantly different from either of them. In other words, students from module B were found to have the highest mean score for 'deep approach'. A similar pattern was found in students' score of 'seeking meaning and understanding' scale where students from module B had the highest mean score (M=4.23, SD=.58). However, this score was found to be significantly different from the mean scores from both module A students (M=3.85, SD=.64), and module C students (M=3.67, SD=.50), but no significant difference was found in the mean score for 'seeking meaning and understanding' between module A students and module C students.

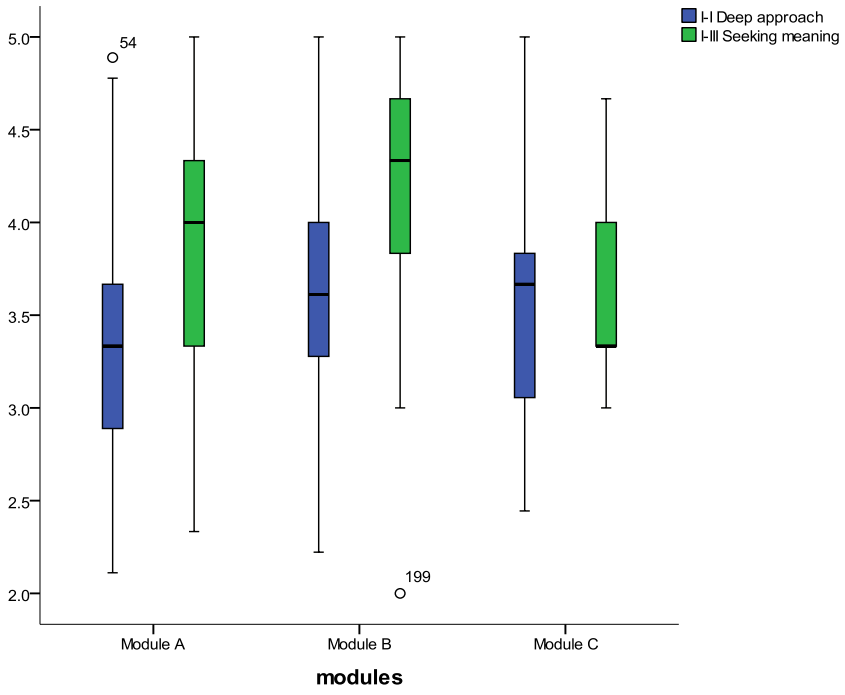

Figure 4. 4: Boxplot of module groups in scores of 'deep approach' and 'seeking meaning'

From Figure 4.4, it is evident that students from module B scored higher than students from module A and C both on 'deep approach' and 'seeking meaning'. It confirmed a finding presented in the earlier section, which showed there was a positive relationship between those two scales. It seemed that module B was more likely to promote students' deep approach to studying and encourage students' seeking meaning while learning. The reason behind it might be revealed by group differences in students' perceptions towards the three different modules.

Part II students' perceptions of TLA environments

In the second part of the questionnaire, students' perceptions of teaching learning and assessment (TLA) environments were compared across modules, the assumption of homogeneity of variance-covariance matrices in MANOVA was found to be violated by the data. Kruskal-Wallis tests were performed firstly to detect any potential significant differences. With the exception of the scale of 'peer support', the other six scales of 'students' perceptions of TLA environment' were found to be significantly different across three modules by this non-parametric test. Due to the cross correlations among those scales, ANOVA tests were checked again, using a Bonferroni adjusted alpha level of .007, and the scale of 'doing well in assessment' was found not to be significantly different with respect to the perceptions of different module students. Table 4.12 presents the statistics derived from ANOVA, and Table 4.13 lists the mean score and standard deviations on the six scales in different module groups. Comparing the effect sizes, only 3% of the variance in perceived 'assessment' environment is explained by the different modules. According to the generally accepted Cohen criteria, this can be considered as quite a small effect. In addition, the mean scores also showed little difference on this scale.

Table 4. 12: Module differences in scores of questionnaire part II by ANOVA tests

ANOVA tests on Students' perceptions Of TLAE	F	Hypothsis df	Error df	Sig.	Partial Eta Squared
I Learning opportunities	28.84	2	215	.000	.21
II Learning supports	8.20	2	222	.000	.07
III Feedback	8.10	2	226	.000	.07
IV SIA	7.52	2	226	.001	.06
V Alignment	12.41	2	229	.000	.10
VII Assessment	3.80	2	225	.024	.03

Table 4. 13: Mean scores of questionnaire part II scales across different modules

	Module A		Module B		Module C	
	Mean	SD.	**Mean**	SD.	**Mean**	SD.
I Learning opportunities	**2.90**	.76	**3.63**	.65	**3.86**	.72
II Learning supports	**3.86**	.60	**3.79**	.63	**3.15**	1.10
III Feedback	**2.96**	1.06	**3.58**	1.00	**3.04**	1.16
IV SIA	**2.99**	1.17	**3.58**	.75	**3.01**	.99
V Alignment	**3.65**	.80	**3.85**	.77	**2.72**	.98
VII Assessment	**3.57**	.82	**3.88**	.64	**3.61**	.68

Among the five scales where there were significant differences across the module groups, three different patterns were found. Firstly, with regards to students' perceived opportunities for quality learning, as shown by Figure 4.5, students from module A (M=2.90, SD=.76) perceived least opportunities for quality learning, and module C students (M=3.86, SD=.72) perceived most opportunities for quality learning. Among the three module groups, module A was found to be significantly distinct from the other two modules, and no significant difference was found between module B and module C on this scale. This finding makes sense of what has already been observed concerning the level or the extent of SIA set in the module. Compared with module B and module C, module A has a relatively lower level of SIA. Thus, module A is distinct from other two modules in terms of teaching, learning and assessment environments. For example, module A is the only module where the examinations are heavily relied on. A fuller description of the distinctive features of module A will be presented in detail in later module analysis chapters.

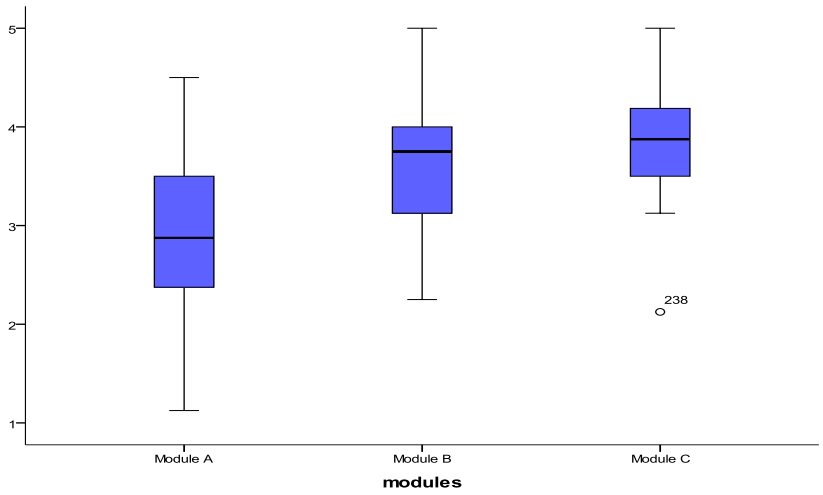

Figure 4. 5: Boxplot of module groups in scores of 'students' perceived opportunities for quality learning'

The second pattern of module differences was identified in students' perceptions of teaching learning and assessment environments. Module C was found to be significantly different from the other two modules in this concern. As shown in Figure 4.6, and when compared with the first pattern where module C was scored highest in 'perceived opportunities for quality learning', it was found to score lowest on both students' 'perceived learning support available' and on 'clear aims and curricular alignment'. This might suggest that in module C, compared with the other two modules, there was less learning support provided to students, fewer clear aims and less curricular alignment acknowledged to students. As outlined earlier, one of the salient characteristics of module C was that self-directive learning dominated in this module learning rather than taught learning. Compared with other modules, there was much less teaching involved because of this module design. This reason might contribute to what was found here.

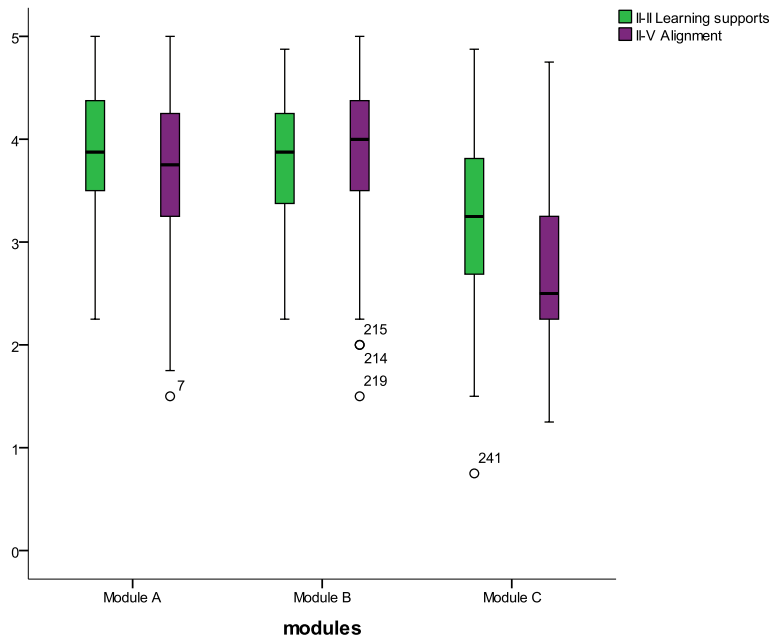

Figure 4. 6: Boxplot of module groups in scores of 'students' perceived learning supports' and 'teaching and learning alignment'.

The third pattern in module differences with respect to the five scales on TLA environments appeared between module A and module B on students' perceived quality of feedback and students' experiences and attitudes towards SIA in modules studied, and this time module B was the noteworthy one. As can be seen in Figure 4.7, students from module B scored comparatively higher on both scales than the students on the other two modules especially those on module A.

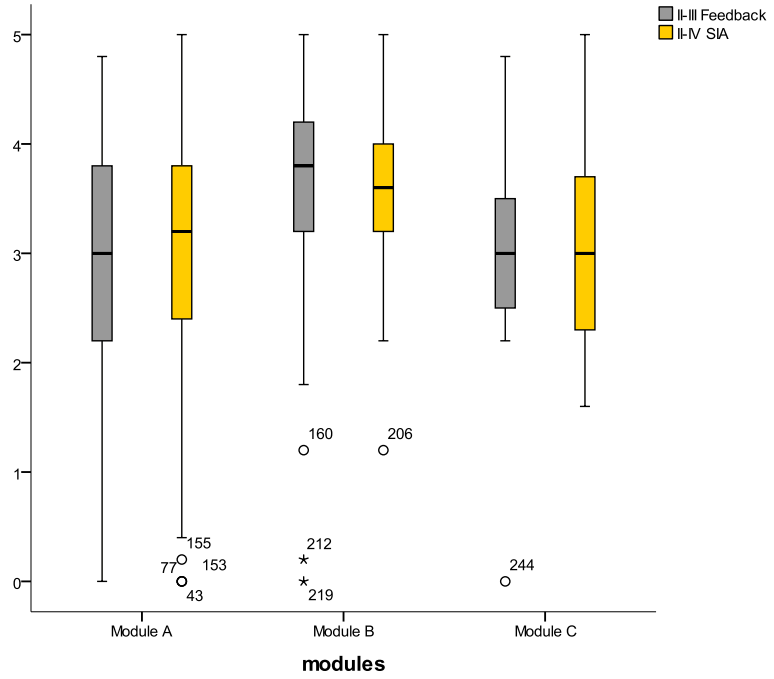

Figure 4. 7: Boxplot of module groups in scores of 'students' perceived quality of feedback' and 'students' experiences and attitudes towards SIA'.

Part III students' satisfaction with the modules

As described in chapter three, the third part of the questionnaire comprised eight questions on students' satisfaction with the module on eight aspects including: the idea of being involved in the marking and feedback giving process (S1, SIV), the way the module has been taught (S2, teaching), the way that students have been assessed (S3 assessment), the learning outcomes of acquired knowledge and subject-based skills (S4, knowledge), the development of the ability to think critically and make judgments (S5, critical thinking), interpersonal communication skills (S6, communication skills), self-organising and self-regulating skills (S7, self-regulation), and other transferable skills such as IT skills, or presentation skills (S8, other transferable skills).

When the eight aspects of satisfaction with the respective modules were compared, the S1, S5, S6 and S8 scores were found to violate the assumption of homogeneity in parametric analysis of comparing groups but Kruska-Wallis tests showed significant differences on the four scales among the three different modules. Other than that, no significant module differences were found in other aspects of satisfaction either from

parametric or non-parametric analysis. Figure 4.8 shows the module differences found by Kruska Wallis tests, and they were S1, H (2)=7.77, p=.021; S5, H (2)=20.20, p=.000; S6, H (2)=15.65, p=.000; and S8, H (2)=18.54, p=.000.

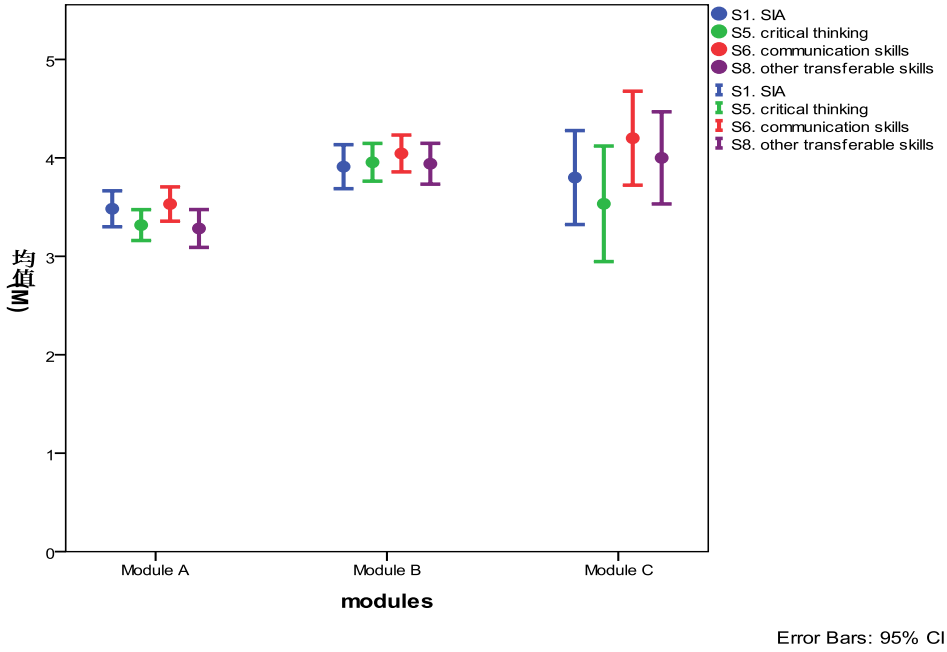

Figure 4. 8: Error bars of module groups in scores of satisfactions towards the module

In Figure 4.8, mean scores are indicated by the dots marked on the line bars, and lines indicate the precision of the estimated means (here the 95% confidence interval was plotted). By looking at the mean scores, it seemed that students from module A had the lowest satisfaction on four aspects of satisfaction among the students surveyed. By contrast, students from module B seemed to have the highest satisfaction with respect to student involvement in assessment (S1) and critical thinking ability and making judgments (S5), while students from module C appeared to have the highest satisfaction in interpersonal communication skills gained (S6) and other transferable skills (S8).

Up to this point, the module differences were noteworthy from what was presented above. However it might be too early to draw the conclusion on students' perceptions of TLA environment and their satisfactions towards the module they studied, as the statistical findings presented here were just a quantitative scale measured by different groups of students who might not have experienced all three modules. Therefore the

statistics here could not be interpreted as the differences in the relative qualities of the teaching, learning and assessment environments. It is for this reason that an analysis of the qualitative findings is also necessary. Here in the section, the module differences were the main concern, and the qualitative differences of TLA environments within each module will be illustrated along with the interview data in the module analysis chapters (chapter 6, 7, and 8).

4.5.3. Group differences in year of study

With regards to the exploration of the group differences in different years of study, as mentioned earlier, the year of study was characterised by the module of study, it was expected that quite a similar pattern would be found to that presented in module differences. Module A was dominated by students in the early years of study, and module B was solely taken by third year students, while module C was solely taken by fourth year students. The similar analysis techniques and process were carried out, and detected group differences in the years of study were less than what had been found for the module groups. However with the detected group differences, as predicted, the patterns were found to be quite similar to what was found in the module differences. Therefore, in this section, it was not intended to repeat each single pattern in the group differences but to demonstrate the similarity and dissimilarity compared with the patterns found in previous module differences by three broad categories based on the questionnaire structure.

Firstly, in the students' approaches to studying, similar with what had been found in module C with regards to 'seeking meaning and understanding', the third year students were found to score highest, while the second year students were found to score highest on the 'surface approach to studying'. See Figure 4.9 where the pattern shown was quite similar to the pattern shown in Figure 4.4. It seemed that students from the lower years were more likely to take the surface approach to studying compared with the students from the third and fourth years. However, the reason might not depend on the year of study but on the module setting. The evidence

shown here did not suggest that with an increase in the year of study, there is an increase of seeking meaning or a decrease in taking surface approach.

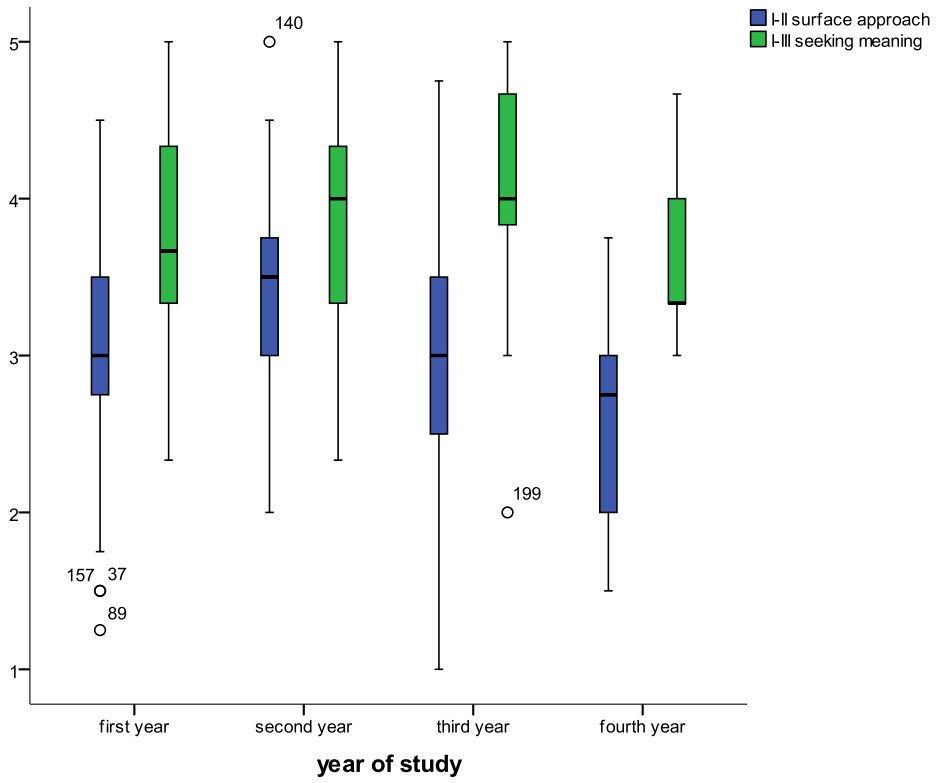

Figure 4. 9: Boxplot of students in different years in scores of 'surface approach' and 'seeking meaning'

Secondly, the group differences detected in the students' perceptions of TLA environments again showed a similar pattern to that found in the module groups as shown in Figure 4.10 and Figure 4.11.

Thirdly, with respect to the students' satisfaction with their modules, only scores for communication skills and other transferable skills varied across different years of study. However, the pattern, as shown in Figure 4.12 also coincided with what was shown regarding students' satisfaction on the two scales in the different modules presented in Figure 4.8.

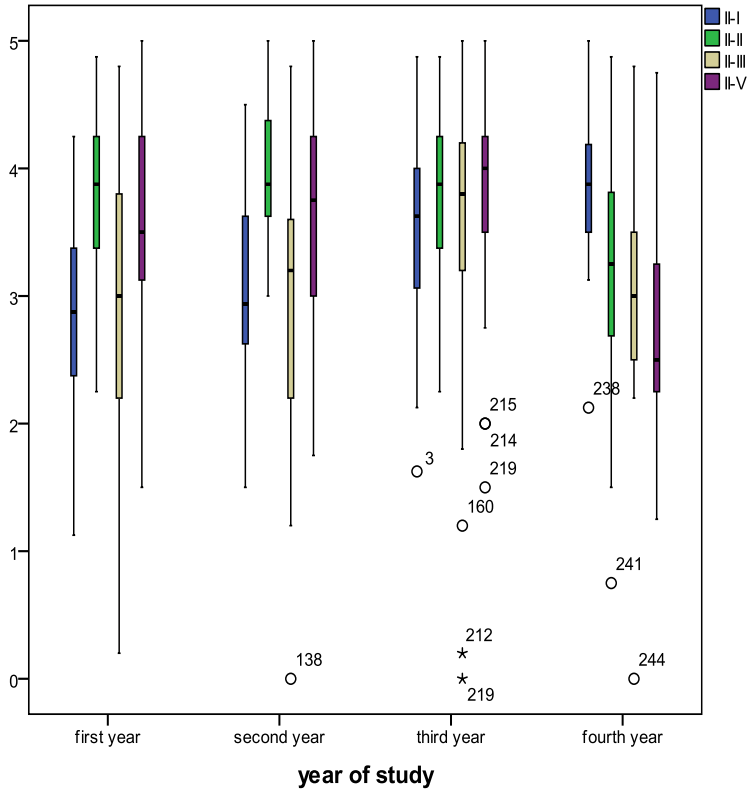

Figure 4. 10: Boxplot of students in different years of study on detected different scores of TLA environments

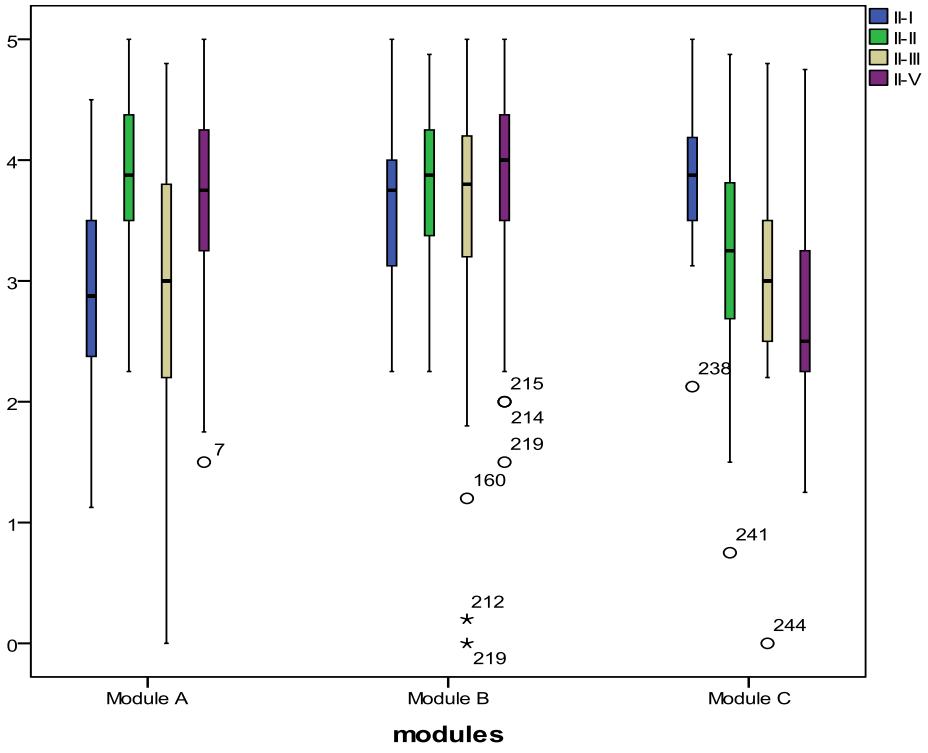

Figure 4. 11: Boxplot of students in different modules on detected different scores of TLA environments

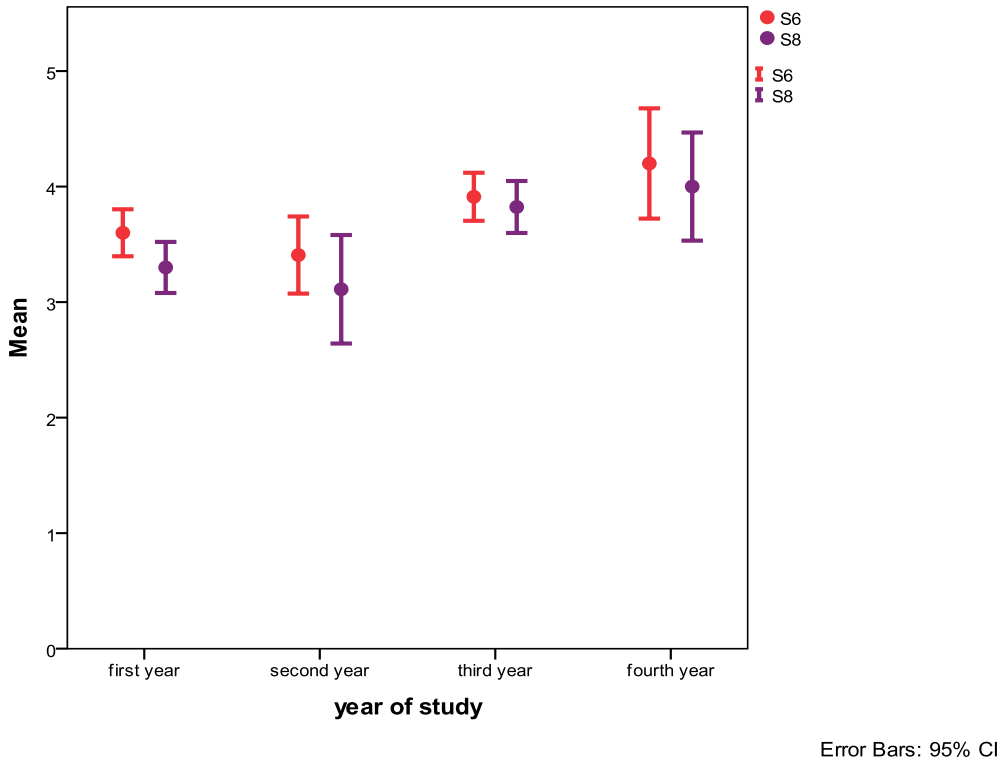

Figure 4. 12: Error bars of students in different years of study on detected different scores of satisfaction with the module

4.5.4. Other group differences

Over and above differences in age, module and year of study, students also varied in terms of gender, year of entry, study modes and their parents' higher education background. However, no significant differences were detected in relation to gender, year of entry, or parents' higher education background. In other words, those characteristics were not found to be significant influences on students' approaches to studying, their perceptions of TLA environments, or their satisfaction with the module studied.

However, a significant difference was found in relation to different modes of study on students' perceived opportunities for quality learning, F (1, 200)=7.23, p=.001, partial eta squared=.06. Minor differences were found in students' satisfaction with

communication skills, F (1, 223)=8.46, p=.004, partial eta squared=.04; and other transferable skills, F (1, 223)=8.3, p=.004, partial eta squared=.04. As Figure 4.13 suggests, full-time students were more likely to recognise the opportunities for quality learning, and they were more likely to be satisfied with the development of their communicational skills and other transferable skills.

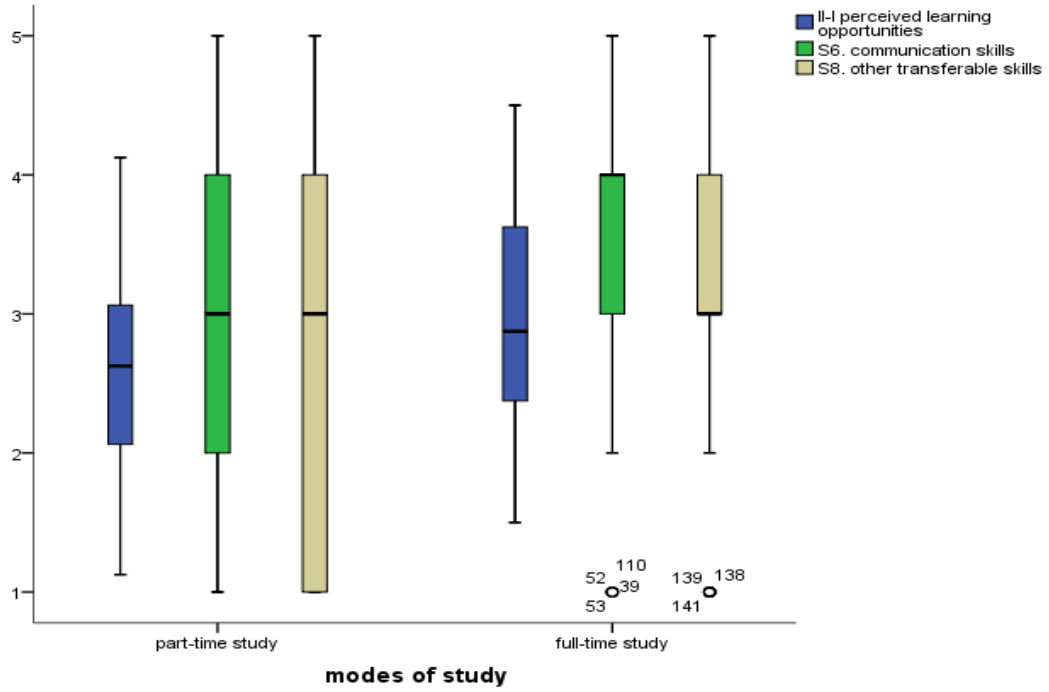

Figure 4. 13: Boxplot of detected differences between part-time students and full-time students

To conclude, Table 4.14 summarizes the results obtained by the tests, and demonstrates the group differences. In the table, the symbol "V" indicates that there were significant statistical differences (p. ≤.05) between the groups. Statistics generated from MANOVA shown in Table 4.14 suggests that no statistically significant group difference was detected in 'effective study organisation', perceived 'peer-support', 'how to do well in assessment', and in S2, S3, S4, and S7.

Table 4. 14: Summary of group differences generated from quantitative analysis

Scales	Gender	Age	Module	Year of study	Year of entry	Mode of study	Parents' education
I-I			√				
I-II		√		√			
I-III			√	√			
I-IV							
II-I			√	√		√	
II-II			√	√			
II-III			√	√			
II-IV			√				
II-V			√	√			
II-VI							
II-VII							
III-S 1			√				
III-S 2							
III-S 3							
III-S 4							
III-S 5			√				
III-S 6			√	√		√	
III-S 7							
III-S 8			√	√			

I-I. Deep approach
I-II. Surface approach
I-III. Seeking meaning and understanding
I-IV. Effective study management

II-I. Opportunities for quality learning
II-II. Learning support available
II-III. Quality of received feedback
II-IV. Students' experiences and views about SIA
II-V. Clear aims and curricular alignment
II-VI. Student peer support in learning

III-S 1 Satisfaction with the idea of being involved in the marking and feedback giving process
III-S 2 Satisfaction with the way that the module has been taught
III-S 3 Satisfaction with the way that students have been assessed
III-S 4 Satisfaction with the learning outcomes of acquired knowledge and subject-based skills
III-S 5 Satisfaction with development of the ability to think critically and make judgments
III-S 6 Satisfaction with interpersonal communication skills
III-S 7 Satisfaction with self-organising and self-regulating skills
III-S 8 Satisfaction with other transferable skills such as IT skills, or presentation skills

Finally, it was interesting to see that the only group difference of students' experiences in SIA was found in different modules. This might suggest that students' experiences of SIA were strongly dependent on the module design and closely associated with the particular contexts of the module.

4.6. Conclusion

This chapter has reviewed the quantitative data collected by the questionnaire. By exploring the four parts of the questionnaire data, generally speaking, the adopted and revised questionnaire was found to be working reasonably well. This may have two implications for research in this area. Firstly, the findings from this research could be compared with previous research which was conducted based on the original inventory. Secondly, the new scale in student involvement in assessment has added a new dimension to the inventory. The inventory as a research instrument is enhanced in a form that encompasses wider aspects of the teaching, learning and assessment environments.

The group differences in the three parts of questionnaire, especially the module differences in students' perceptions of TLA environments were set out in this chapter, in order to provide a broad picture based on the module context. Later in Chapters 6, 7, and 8, the in-depth analysis of modules will be presented integrating the quantitative and qualitative data findings.

CHAPTER 5 QUALITATIVE FINDINGS I: THEMATIC FINDINGS

5.1. Introduction

In the last chapter, the quantitative data outlined the general picture of students' approaches to learning and their perceptions of the teaching, learning and assessment environments in regard to each module studied. It is evident that students' approaches to learning and their perceptions of teaching, learning and assessment environments are very much germane to the module settings compared to other demographic features such as age or gender. The aim of this chapter is to further confirm and explore the answers to the first two research questions (students' perception of SiA and the main factors to influence students' SIA) that have been outlined in Chapter four. This chapter also reports the main themes identified from the interview data to explain why students perceive SIA in the particular way. Some of the themes and identified categories are aggregations of students' views across the three modules, and some of them may only represent one particular module.

Following the findings of the quantitative study on students' perceptions of the module and module assessment, interviews were conducted to further explore students' perceptions of SIA (student involvement in assessment). The first theme identified details students' views on SIA more specifically with regard to the benefits and challenges perceived by students who have experienced SIA. The second theme identified attempts to reveal how students engage with SIA in the modules studied, with a view to answering the third research question. The third identified theme is related to the second research question which aims to investigate the main factors influencing SIA. These identified themes will be reported descriptively at this stage together with some substantive quotations in order to give the reader a taste of what students have said about their involvement in assessment.

5.2. What are students' views on SIA?

5.2.1. Commonly perceived values and benefits

More control and responsibility in students' hands

Students across the three modules found that as students they had more control over their own studies and greater involvement in the assessment process. However the level of control over study differs between modules because of different levels of involvement from students in assessment methods. This was confirmed when students talked about their roles and responsibilities in different modules.

Firstly, 'autonomy' was highlighted by students in module C, where self-designed assessment was used. Informants from this module used words like 'control', 'freedom', and 'decision' to describe the big differences in this module compared to others. For example, informant BM243 saw the 'choice' they got as an opportunity to make decisions for themselves. In a similar way, informant 241, a fourth year Management Science student, perceived their 'input' in designing assessment as 'having a say'.

> *BM243: We all decide for ourselves. It's good that we have this kind of* ***choice****… Good to be able to come up with what would you like to study yourself rather than taking lecture notes and stuff. I liked it.*

> *BM241: It was interesting and we've got a lot of input in this class. There wasn't that many classes as such … We also got some say in assessment… we had full* ***control*** *from the first week, and we decided what we wanted to do…*

Students from this particular module were found to be more interested in the subject they chose to learn when they were talking about 'autonomy' they perceived in this module. It was noticeable that words like 'interests' and 'motivations' were always in the wake of words such as 'freedom' or 'choice' in their comments.

> *BM241: The* ***freedom****, and the chance I had to do the things which I was interested in. You were more kind of motivated, because you were more interested… So it was all things about using our management science knowledge, but in a way that interested us that we hadn't done before.*

*BM243: Probably the fact that we got to **set everything ourselves**. Because if we hadn't, we probably would end up with something which was quite boring like writing a report, making some sort of spreadsheet or something which was what we normally did before. I hadn't really used databases, so it was really good.*

In contrast to module C, words like 'autonomy' or 'freedom' were not used by students from the other two modules where student involvement was not as high. Students from module A used words such as 'flexible' and 'responsible' when they were talking about their online self-test:

*BM26: If you don't do it yourself, you are not going to learn here…you are **responsible** to yourself…*

*BM40: It is kind of **flexible** comparing with other exams, as you can **choose** your own time and you also can do it as many times as you want…*

While students from module B used phrases such as 'say in' and words like 'responsibility' when they were talking about their experience of peer assessment:

BM166: We had a lot of say in other's work and our own work. Like peer assessing and self-reflection. But as I said, I feel that we had a lack of choice on the topic and style. I would like to be more involved, even sitting down to talk with the teacher and let him know that what I want and what I like. I think that would be a good way.

*BM168: [There was] too **much weight on people's shoulders**. I mean you've been friends for three years, and you don't want to let them down, and, I mean, it is hard to make such a decision, you know, you will think a lot…*

*BM176: I think it's really good. It shows **responsibility** as well. They will have an idea of what they [others] think, and how they valued the work of others.*

*BM167: I don't like that though, because I feel someone's mark is **down to me**, and I have to **be responsible** for them if I gave them a bad mark or comments…*

Although most students who had self assessment in module A claimed a kind of flexibility for the online self-test, and most students who peer reviewed in module B found increased responsibilities with regards to marking others' work, few of them identified that they had control or autonomy through this involvement in assessment. Therefore, involvement in assessment did not necessarily mean 'autonomy' to

students, however 'responsibility' was found to be connected with SIA when students were talking about their perceptions.

Beneficial for future career or employment

The most commonly-held value about student-involved assessment was the perceived benefit to later employment or career development. Most students who were interviewed (13 out of 18) across the three modules talked about the relevance of their newly-gained experience in assessment to later careers or employment. They mentioned that such assessment would be valuable to future employment, and that they did value the transferable skills gained from the process. The extracts below represent their concerns about future careers or employment.

> *BM176: Because you will find after this level, whether you decide to go for the 4th year [or not], when you go out in the field, what you take from here is good to help in the field itself.*

> *BM241: In terms of the way we got to choose to mark the work, I think it was nice to be able to take a teacher's point of view… to see what they are looking for, sort of, analyze how you would really work out a project. Because I guess, in a consultancy job, you'd have to do it for yourself.*

Some informants also specified time management, assessment skills, and teamwork as transferrable skills that would help in their later careers:

> *St88: I mean at the end of the day, you've got to be able to evaluate your colleagues' performance at work, or you've got to make decisions on various situations… I think all those [skills] are goanna help you later.*

> *St240: I think I've learned how to plan my time. As we had to decide our schedules such as deadlines for budgets, raising money and so on…*

> *St167: I think I've learned how to cooperate as a group and meet the dead line. Obviously these skills will be taken with me to later jobs.*

The majority of the 13 people who claimed such benefits related to future employment were students from modules B and C. Some skills or benefits specific to a particular assessment method identified by students will be discussed in detail in the module analysis chapters. Not all students emphasized that it was necessary for

them to have this experience in order to be able to undertake such tasks in the workplace. Some students just orally admitted such a potential benefit. The students quoted below just generally agreed with this view. For some of them, like student 240, it was so obvious to them that this was something they should know, and that they did know, but that did not necessarily mean that they really valued the experience. Or that they actually believed what they were saying when they asserted its usefulness. However, some of them, for instance student 59, had not experienced such involvement before yet assumed it was of potential value.

> *BM240: I guess [it] may not be useful to study directly, but [it] could be useful to my life and work later.*
>
> *BM40: Obviously, it would be good on my CV saying that I had done some kind of teamwork and got/gained teamwork skills, something like that…*
>
> *St167: I don't think the presentation should be marked at all, though I know it is good for your later job.*
>
> *St59: Haven't done so here, but I think it would be good if we had this. I think it is always good to see others' work, and [discuss] what you think, because you will be always doing this in your jobs.*

Whatever they claimed and however they expressed this view, at least those 13 who mentioned these benefits were aware of the valuable role such involvement required from them.

Enhanced learning opportunities

The other common value expressed by students who had some experience of higher involvement in assessment was the unique learning opportunities provided by those student-involved assessment methods. This common value is a bit more nuanced than the previous two. Different students might see different learning opportunities open to them according to different situations and assessment methods. The 'learning opportunity' here means that students can have a chance to reflect and self-monitor their studies by being involved in the assessment process. For example, student 241 found that peer assessing and designing his own assessment tasks gave him a chance to think about how he could best present his work. It is a chance for students to reflect on their own work and practice.

BM241: The second thing [I got from this module] would be with the assessment aspect. Deciding on that, being able to see from an outsider's point of view, and the work we were doing and how to mark it. So that was good -- to see how best to show our work, and to think about that. So that was a good thing to have.

Moreover, the extract below shows how students also benefited by giving others feedback or self-marking. Students were actively seeking feedback from those activities.

BM176: I found it [giving others feedback] was helpful for myself as well, cause the feedback I gave was also building you up.

In the extracts above, the learning opportunity opened to students was an environment and space for them to be able to see and share in each other's thoughts and work, rather than doing work themselves in private, as with more traditional individual exams or essays. Learning opportunities were also found by students when they were involved in marking their own work. Students who had marked their own work or did online self-tests found it was a good chance to monitor their study.

BM59: It is amazing, as obviously you can see what score you've got, and also what you got for the 1st one, the 2nd one… so you can see how your performances have been in each section. I mean when you got the overall mark achieved, you could work out yourself where you should work on more to get the average score higher.

BM89: I think it was very useful in terms of self-assessment. The handbook said not to use the book while filling in the answers, but I always went back to the book or notes or references if I was not sure about some questions, because I wanted to know the answers and learn from it when I was not sure. So it was reminding me where I needed to pay more attention.

Greater self-confidence

Although many students were not sure about what they were supposed to do when they were asked to mark or design their own work, the majority of them found that they were more confident in doing such assessment in future after this experience. This self-confidence manifested itself in three different ways. Firstly, a small but significant number of students expressed that they were more confident in assessment skills such as marking and giving feedback.

BM07: I think it'll make me easier to do so next time… I would know what kind of things I need to include in my feedback giving, such as not only[the] negative side but also some encouragement.

Although only a small number of students claimed such differences after they experienced the assessment, this can still be taken as an indication that this practice could have potential benefits for developing students' assessing and assessment skills. It is also worth noting here that there are many other factors which may affect students' development of assessing and assessment skills. This will be discussed in detail in the next section.

Secondly, this greater self-confidence was very commonly achieved simply by doing the module and the subject itself by the majority of students (10 out of 18). This is perceived as students' academic confidence in themselves. Students from module A were particularly confident in their later exams after having done the online self-tests:

BM26: Once I got the results from the online tests, it kind of made me confident in a way that I feel I can do it. As when you got the right answer, you'll know you can do this, this and this. When you got it wrong, you find out where you got wrong and how can I do it there, there and there.

BM88: It made you feel confident when you got them all right … You are sure that you are prepared to sit the exams… and you know it…

This academic confidence in subsequent assessment or in the learning process was less prevalent in students from the other two modules. With module C, students voiced uncertainty about their performance and uncertainty in their own learning. For example, when the fourth year student 240 was asked about how well she thought she performed in an assessment she designed herself, she did not have a clue.

BM240: . I just followed my thoughts on what would be the best, and tried my best to do all the things that I could think of.

Thirdly, some students found greater self-confidence in learning in general. Five of them were mature students who had worked for several years before and came back to the university for further education. They found their experiences in SIA helped them to make the transition from workplace to campus learning, one mature student said:

BM256: I became more confident because of this [peer assessing], because I could compare my own work with others, then it got me that I was actually not that bad and I could do this. Before, I was not sure about it. You know I was away from school for ages, and being work outside doing nothing about learning. I was really nervous…

5.2.2. Experienced difficulties and challenges

In this section, the focus shifts to the challenges of SIA perceived by students in practice. Students were asked to identify any issues they found challenging or that did not work well in the process of their involvement in assessment. Most of the challenges reported were found in the SIA group work scenario.

Marking group work

Concerns about fairness in marking were voiced most often by students in group work situations. Some challenged the fairness of giving the same mark to all the members in a group. Conversely, others were not sure about the fairness of giving different marks to different members in a group.

BM243: When you work in a group, somebody just gets the group mark even [if] they do not work that much, and some do not get anything extra if they do lots and lots of work.

BM26: Not sure about the group work. It tended to cause problems. For example, if you are working in a group, but someone got a lower mark than you, he may not think it's fair. The other problem is disagreements. It is not very easy to come to a consensus sometimes.

Some students also pointed out that 'game playing' occurred in the group system.

BM243: I think most of the time we are just marking our contribution to the group, not really the quality, but a lot of people are playing the game of marking system.

Student BM177 pointed out one of the difficulties of marking group work or group effort was the lack of 'evidence' for group work and group effort.

BM177: It is really difficult to find out who is putting on the way, and who isn't, because of the plagiarism thing----the final portfolio with everybody's individual works. People won't want share too much. And then you think 'well, I actually don't know what you've done, because you are afraid of sharing with me. I can't prove it, and I can't measure it…'

Marking friends

Another common difficulty that informants acknowledged was marking friends, especially when giving friends a low mark or negative comments. Like most of the students in the interviews, students BM70 and BM168 concluded what they were worried about judging a friend.

> *BM70: To be honest, I am still struggling to give negative comments to someone…as you don't want to offend your friends.*

> *BM168:[It's] too much weight on people's shoulders. I mean you've been friends for three years, and you don't want to let them down. It is hard to make such decisions, you know, you will think a lot, as people will ask you why you are giving such low marks. I don't mind marking someone I don't know and will never meet again. Because I could be honest that way, also I would be happy with a mark given by someone who doesn't know me.*

Compared with giving friends a mark, giving friends feedback was found much more acceptable and easier for most of the students interviewed. Like many others, student 168 found it difficult to mark his friends, but he was much more comfortable about giving feedback which would not have any effect on the grade:

> *BM168: I think I took this more seriously, as you know the mark would not have any effect on their final mark. So you just say what you really think about their performance.*

> *BM166: I think it's okay to give people feedback; to suggest what's bad and good. If you start giving people a grade, it could cause problems.*

Lack of dialogue between mark/ feedback provider and the receiver

The final issue to be highlighted, that students from across all three modules experienced, was a lack of dialogue between the marker or feedback provider and the receiver. Students were involved in marking or feedback giving, but most of the time they did not have the chance to talk with the author of the work to find out more about what they were trying to achieve or to explain why they were giving such mark or feedback. In the same way, students found there was not an opportunity to understand why they got the mark they did or particular feedback from their peers. In some instances, apparently the feedback provided by peers was not delivered to the students themselves, as described by Student 176.

BM243: We didn't have as much conversation as we should have. This was probably the downside of our activity. As we really should have gone back and talked more with the teacher about what they are looking for…

BM176: I did not see them. We did not have chance to see them. The feedback we gave was just handed to the teacher, and they did not pass it back to us. Maybe it would be good to have a look at what other people said about your work. But I am not sure how much it would help.

BM166: No, we didn't [have a chance to see the feedback given by our peers]. I thought that was the downside of it. I would like to know the ideas and things that I could improve but at the same time I would like to see what I did well and what people liked. There's nothing worse than just giving a grade.

For most of the students who did not get a chance to see their peers' feedback, they wanted to see it to discover how others perceived their work. However, for the rest, they did not want to see it because they were not sure whether the feedback provided by their peers would be helpful, as was the case with Student 176. It seems that the feedback cycle was not fully completed in this process. Being able to see others' comments or being able to talk about each other's work might be more helpful than giving a mark or giving feedback

. It could promote students' engagement with SIA because they would have a chance to see the potential benefits of exchanging ideas and views with each other. However this interaction was found to be absent across the three modules. For example, what student BM166 describes in the tutorial discussion could have resulted from this absence:

BM166: It was very quiet. I guess everybody was worried about embarrassing people or making people's lives difficult. It can be good, but it can be bad as well, as you've no idea how you did, or if the rest of class will understand… If everybody is quiet, then you don't feel comfortable talking about it. But I did manage to speak my views. As for the written feedback, we got to see it. It would be good to look at them.

5.3. How did students engage with the process of SIA?

This part looks at how students engaged with such assessment when they were more involved in things like marking, or feedback giving, or designing their own tasks. The ways students engaged with SIA can be categorized into two distinctive approaches: deep-approach and surface-approach. The following findings describe the characteristics of these two distinct approaches to SIA.

5.3.1. Deep approach to SIA

Marking fairly, objectively and responsibly

One of the most distinctive characteristics of a deep-approach response to SIA was found in students' peer and self-judgment. There were students across the three modules who were found to take peer assessment seriously and gave peers or themselves objective judgment according to assessment criteria. They took their involvement as a responsibility and as an opportunity to develop themselves. For example, one student said she felt like a teacher when she was judging peers' performance:

> *BM166: I felt I was like a teacher. I noted down how they organized their presentation, and how they paced while they were talking. And what they did well, and not so well, and how it could be improved according to my view. For example, some groups were reading off scripts, and I suggested that they'd be better talking with people rather than reading off notes.*

From the prior chapter, it is known that there were only 23 mature students out of the 250 students who participated in questionnaire survey, and only five of the 23 participated in the interview. Despite the small proportion of mature students in the sample, the majority of those who claimed to be trying to mark fairly, objectively and responsibly turned out to be mature students. Seven informants in total were found to be using this deep approach in marking, and five of them were mature students. Like other mature students, BM177 said that she always gave her true opinion and marked honestly .She provides an example of her approach:

BM177: I gave feedback to two other groups and I praised one of them who did really good job. Maybe it is because I am older and I know you don't get praise very much here from each other, so I always give praise if someone did a good job and I mean it.

Self-regulated learning

The majority of students from module A stressed the importance of self-regulated learning in the online self-assessment. For instance student BM26, a second year Business Management student, described how the online self-assessment helped him to develop self-regulated learning and how much he engaged with the activity.

BM26: I do the weekly online tests and also do the previous exam papers which are also online… every week I do it ten times a day probably… *Although it is not connected to the final mark, it's still a part of it. If you don't pass this, you are not going to pass the final one. I think the point is to learn from the online tests, as it will help you with the final exams.*

St138: I think they are good from the point of view that it makes you go back to the book and read it.

Some students from the other two modules also found themselves self-regulating their learning when working in groups. Like student BM255, who said that she worked hard to meet the peer expectations of her group:

BM255: I always prepared before going to the group meeting, and tried to get the assigned work done… I mean, how would I be able to judge my group members' effort if I did not pull my weight? …I was always thinking of how they would think about me and my work…

Seeking learning opportunities for greater understanding with SIA

Students who stated they took their involvement in assessment seriously were always seeking learning opportunities to broaden their understanding. They tried to learn from peers or from their own experiences in group work. For example, one of them actively sought help from her group.

BM256: I asked one student from my group about the assessment requirements and she helped me… What she said actually pretty much made sense to me, and she also showed me feedback she gave on some other group's presentation. I found that really helpful.

Some would also note down the strengths and weaknesses of each other's performances, not only for giving feedback, but also for their own development, as student BM255 did:

> *BM255: I noted down some terms that I did not fully understand and some things I thought could be useful for myself, like some references they used… And when I wrote feedback for them according to my notes…I would also use them [the notes] as a reminder for myself…*

There were also students who learned from others as well as reflecting on their own experiences. One of the mature informants, BM177, described what she was thinking when she listened to other presentations, and clearly she was trying to connect learning with her past work experience in order to try and make sense of what others said and did.

> *BM117: I intend to learn why they do this and maybe a bit more than this [question?]. So that it will make sense to me when I am applying this knowledge. I don't know if this answers your question. When I am studying, like reading a chapter and I am really into it, and my mind starts to wonder applying something else on this, like what it actually relates to etc. I tend to find out how it relates to what I know and connect them together. I can't just read it and take it in without thinking of that.*

Those students who were actively learning to further their current understanding wherever possible represented an important feature of the deep approach to SIA. They also demonstrated what possible learning opportunities SIA could provide to students for improved learning.

Making full use of feedback received

Lastly, students' response to the feedback they received was found to be an important indicator of how students were engaging with SIA activities. For example, students who made an effort to provide meaningful feedback to others were also likely to take the feedback from peers more seriously. Informants BM166, BM243, BM256, BM88, BM59 and BM89 were all found to be responsible towards their peers and themselves in their judgments. All of them stated that they valued the feedback they had received, or given, or that they would like to read feedback from peers in detail and take it on board.

BM256: The first thing I check is of course the mark I've got, but that is not the most important. The feedback and comments on the sheet are more important to me, otherwise I wouldn't need to collect it as I could find my mark online…I will also check if there's any comments left from my peers online.

BM255: I read the feedback carefully alongside my assignment and check what and how I was wrong line by line… Sometimes I take notes…

Although some students did not have a chance to read their peers' comments, they were quite aware of the potential benefits of doing so:

BM59: I think it would be good if we could see them [peer marks or peer feedback]. I think it is always good to see others' work, and what others think about your work.

5.3.2. Surface approach to SIA

Friendship marking and biased marking

Many students talked about 'friendship-marking' as illustrated by student BM240. He commented that *'you are not going mark your friends down…'* Basically, friendship marking is a way to give higher marks to the peers who do not deserve it. Several different methods of friendship marking were reported by informants, student BM138 reported:

BM138: We are having a module like this semester actually, it's a bit of joke really, because some people were sitting there, not filling things in during the time, so they passed their paper to their mate, and their mates were just marking their paper while filling in the answers for them.

For example, there could also be negotiated-marking as student BM240 talked about:

BM240: [It] Feels a bit pointless, as sometimes people talked over what mark they would give each other.

Another situation was biased marking where students marked their peers down for various reasons. Student 243 observed in her group:

BM243: I don't think it works in the honor's year, [be]cause I think there's a lot of game playing. I think it works well up until honors ... Because at honor's year, a lot of people don't want to be marked down, so they won't mark anyone up because they feel that by marking someone up they are marking themselves down.

Sometimes the bias might be because of a bad relationship or misunderstanding between students, as student BM177 describes:

> *BM117: I feel the young ones tend to fall out or have arguments. So peer marking might give somebody a mark which is not reflective of their work. From this point of view, I am not that supportive of peer marking… it could be a biased mark, and I have seen this happen.*

There was one other type of surface approach to peer marking:

> *St241: I don't really think about it anymore. I guess I first did it when I was in 2nd year, and I guess at that time it was a bit scary. As you know you could affect someone else's mark just by being mean to them and by pressing that button. But now, I have just got used to it, and we've got to do it ten times a year… because you have to do an average of 3, so yes, that's a safe mark to give.*

In self-assessment or self-designed assessment, this inaccurate marking could also happen:

> *BM138: But in terms of assessing what you know it is a bit pointless, because the majority of the time, you just sit there with textbooks open, and with any other web links you can look up. Then you get 100% on the test, because you have the answers in front of you. It's a bit pointless.*

> *St243: Because you are writing your own criteria, you are obviously going to make them quite easy because you want to get good marks. So you managed to do that, but then you feel like it should supposedly be the same as all the other honors' year modules. We did not learn that much really.*

It can been seen that some students were confused about the point and purpose of being involved in the assessment process when it came to marking or grading. This coincided with the difficulties and challenges found by students in the process.

Minimized effort to meet the task requirements

Another characteristic of the surface approach to SIA was making the minimum effort needed to meet the task requirements. For example, students from module C were involved in designing assessment tasks, and some students were found to design their tasks to make life easy for themselves rather than for the sake of learning. Students from module A were involved in online self-assessment, and some of them did the online quizzes with their books open in order to get the

contributed grade, because it was the requirement from the teacher, not because it would be helpful to their understanding.

> *BM243: I think most of the people were ambitious to learn more, but maybe it would not be examined or something, so in the end, everyone just simply learned how to use it…For Group report, which we've done a lot, so everybody was kind of comfortable with that and knew how to do it.*

> *BM89: I remember quite a few times that I did the online self-test quite late, almost the day before the deadline, and I did it with the book open in front of me. I just did not have time to test myself, and then go back and correct.*

Taking or giving free-rides in group work

Some students only made minimum effort in SIA in the group situation. Some students reported that the group did not share the responsibility of the assessment, such as designing the objectives or giving feedback, but left those tasks to one or a few students. This is referred to as 'free-riding' (Davies, 2009) or 'social loafing', where within a group there are individuals whose contribution is perceived to be less than that of others (Pieterse and Thompson, 2010). More importantly, those individuals who withdraw their engagement and effort in SIA did not learn or obtain the assessment skills and other critical thinking skills required for the task involved. In the context of a student-involved assessment task, some students might withdraw their involvement in decision-making and just do what other group members tell them to do, as informant BM240 describes:

> *BM240: One of our group was extraordinarily capable, so s/he wrote the learning contract, and the rest of us just had a look and thought was good.*

Or some students did not even do what had been asked. One of the informants commented that:

> *BM256: I was always the one who wrote the peer feedback for others in my group… I found the same in other groups, because there was a certain person who was always responsible for representing others when giving opinions and feedback.*

Neglect of feedback received

Compared with those students who took a deep approach to feedback, some students were found to have failed to make full use of the feedback received, especially the

feedback they got from peers. Students who did not take feedback seriously were less likely to be engaged in providing meaningful and fair feedback to others. One individual, student BM167 from module B, was found to be extremely reluctant to be involved in any peer assessment. She was also very reluctant to do any kind of peer judgment, not only on friends, but also on peers she did not know. When asked if she would like to see how other peers commented on her performance, she said:

> *'No, I did not think about this. I wouldn't want to, as it would be so scary to see what other people said… I probably would not pay much attention to this, because I don't think they really know what they were talking about. I think most of the comments would not be on the content, but on how I delivered the presentation. Do you know what I mean? I think their comments will be more focused on personal attributes rather than paying attention to academic knowledge as the teacher did. The feedback from people I don't know might be honest, but I still would not trust them. I would like/prefer to listen to teachers' feedback rather peers'. (BM167)*

She would never think of doing this, therefore she thought no one else would either. In addition, a few students found themselves in a difficult situation where they could not figure out the direction of study because they had to make decisions for themselves, rather than just doing what teachers told them. For example, as informants from module C described: *"At every stage, we have people who were* ***not sure*** *which project they would like to do because we had choices".* This was more evident in Module C where more decision-making was required. This will be discussed in the analysis of Module C.

5.4. What are the main factors which influence students' involvement in assessment?

Based on how informants have described their engagement with SIA, in this section, some main factors which influenced SIA were identified by analyzing the interview data. The factors identified are grouped into three broad categories: the student's perspective, the teacher's perspective and the perspective from an institutional level.

5.4.1. Factors affecting the student's perspective

Prior experiences of SIA

Previous learning experiences were found to be influential in student learning at subsequent stages. This fact has been discussed and established in the Literature Review Chapter. The extracts below indicate the influence of previous learning experience on students. There are three different kinds of previous learning experience. Student 243 had no experience of self-designed assessment and therefore experienced difficulties with 'freedom' and 'choice'. In a similar way, student BM240 had no experience in peer marking or group work back in her home country, therefore she found everything 'new' and unsettling.

> *BM243: It was quite difficult to come up when I was dealing first place of what you wanted to learn… I don't think we've had any responsibility before, so we were like, 'okay, so we actually have to make a sensible decision now, how do we start doing that?'*

> *BM240: Back in China, I was always doing things by myself, rarely working in a group or with others. Just studying by myself and then going to the final exams each term. That's it, no other tasks during the term…*

Another situation was when a student had had similar but negative experiences. Those experiences made it difficult for them to engage with peer assessment again.

> *BM240: My first experience of group work here was not that nice. So it made me a bit resistant to such group work.*

> *BM26: Obviously, there were some other projects in the same year in other modules, and the same thing happened. For example, in the project I did last semester, the two boys marked us two girls down, but the girls marked them at 3. So the boys got 65, but the girls only got 60. Clearly there's some game playing going on.*

In contrast, a positive experience, as in the case of student BM59, could bring an appreciation of the benefits of peer assessment.

> *BM59: Before I came here I was working as a supervisor. So I had to evaluate peers' work, and obviously I had to audit their performance. I think that helps a lot, especially in the group work. You can also learn how your*

own work could be improved well. I haven't done so here, but I think it would be good if we had this. I think it is always good to see each other's work, and discuss what you think about others' work.

The evidence here seems to illustrate that previous experience in assessment is indeed an important factor for students' later learning and involvement in later assessment tasks. It is also necessary to note that previous learning experience does not merely mean learning in a formal school setting, but also may include learning in the workplace of the kind experienced by student BM58.

Past work experience

Some main differences in response to SIA were found between the group of mature students who had past work experience and the group of younger students who had not worked before. For example, compared with the rest of the younger students, mature students felt more comfortable or easier with SIA such as peer assessment or self-evaluation, one of them stated that:

BM59: Before here when I got my job, and I was the supervisor. So I have to evaluate the peer's work, and obviously I have audit the performance. I think that helps a lot, especially in the group work. You can know how you could improve for yourself as well.

BM177: When I was at work, we used to ask everyone's opinion and reflect on our work. We always gave feedback on everything and to everyone, but here the younger ones don't do this, and they do not seem to be engaged in this kind of conversation.

Their past work experience also influenced their way of working in groups , for example student BM177 always emphasized 'control':

BM117: Bigger groups are also okay, as long as can I control the discussion… The younger ones are very helpful if you ask them a question, but they are not used to debating with each other. Sometimes when I asked them what they thought, they just agreed with me or had nothing to say. Maybe they get your idea really quickly, or maybe it just makes sense to them.

Trust in peers and one's self, and reliance on teachers' expertise

Another important, and the most common factor from the student side, is that students often lacked trust in peers or themselves about their ability to judge someone's work. In fact, this is because their previous experience, to some extent,

made them too reliant on teachers' expertise and they lacked the confidence to challenge teachers' authority. Students BM176, BM138 and BM26 seemed not to trust the quality of feedback or the validity of the marks that were given by their peers.

> *St176: Maybe it would be good to have a look at what other people say about your work. But I am not sure it would help a lot. I do not think it would, because I've already got the tutor's comments which I took on board. I believe feedback given by tutors and teachers is best, because they know what they are looking for. I may only have looked at part of the whole picture. Teachers are more professional, and they see things more deeply than the rest of us.*

> *St138: I don't think I am qualified to do so, considering I am a student, and I am not any kind of specialist in the field.*

> *St26: When your peers are marking the work, their view might be different from the lecturer. They will give you a mark according to their view, but according to the lecturer their view might not be right. If I got a mark from a peer, the way I would look at it, is that they are doing it based on knowledge not necessarily as valid as the lecturer's.*

The extracts below describe how students might be afraid of challenging teachers' authority. Since they think what the teacher says is always right and should be taken on board. This stance towards teachers' expertise and authority was apparently adopted by most students, which greatly affected how they were involved in the assessment process.

> *St138: I might put something that I think is quite convincing, but then the seminar tutor could say, 'that is actually wrong, you shouldn't have put it there.'*

> *St240: I don't think it [giving our own work a mark] would work… and also everyone's got different standards. I guess the teacher would not agree with what we give to ourselves either.*

One of the main reasons for the lack of trust in peer judgment was found to be their long-time reliance on teachers' expertise and authority.

> *St138: I think it's quite hard for students to mark other students' work on a fair basis. Cause obviously, my idea, I mean, my idea of a good essay probably would not be the lecturer's idea of a good essay, nor the next student's idea of a good essay. You know!*

This lack of trust in peers and in one's self reported by informants was mainly with regard to competence in assessing other's work. In addition to this, there was another kind of distrust among students who were not sure whether their peers would assess their work fairly and responsibly. There were some instances of biased marking or friendship marking, as reported earlier. Some students questioned and doubted the reliability of their peers' decisions, like student BM243, who emphasized the possibility of 'game playing' in peer marking. Similarly, student BM177 also had this worry, especially in the third year.

> *BM243: I don't think it works in the honor's year, because I think there's lots of game playing.*

> *BM177: I think 1st or 2nd year would be better to push people to work with others. 3rd year's score will be taken onto the fourth year, so if anything happens, it would not be fair, and you have no control of the situation.*

Those who reported a crisis in trust of assessment were evident in Carless's study as well. Careless (2009) discussed confidence, integrity and competence issues of trust and distrust between students and their classmates. He regarded trust as 'the confidence one has in the likelihood of others acting responsibly in respect of sound principles, practices or behaviours in assessment'.

Social economy and its influence on grades

Social economy refers to social and personal relations between students. Students' choice of deep or surface approach towards SIA was found to be strongly influenced by social economy. Students' behaviour in peer assessment especially reflected this tendency. This influence will be discussed further in the more contextualised module analysis.

However, different behaviours in peer marking and peer feedback could be explained by the outcome of the mark or grade itself. As students 256 and 168 revealed, it was the effect of the 'mark' that they cared about in regard to peer assessment:

> *BM256: As long as my comments wouldn't affect anyone's final grade, that [peer-assessing] would fine with me, otherwise I would be very nervous about judging someone's work.*

BM168: I think I took this [assessment on a peer's presentation] more seriously, as you know the mark would not have any effect on their final mark. So you just say what you really think about their performance.

5.4.2. Factors from the teacher's perspective

Moral support from teachers

There were many factors involving teachers which were relevant for the students' engagement with the assessment. These included the teachers' attitudes towards student involvement, their interest and passion each individual or the subject, as well as their willingness to help students with regards to SIA issues. These aspects are brought together under the heading 'moral support from teachers'. The extracts below are just some select examples of what students mentioned about how teachers could better assist SIA.

BM138: Yeah, in some classes, the teacher gave us some exemplar papers from the past. For example, for a report, they gave you some examples of good reports, and some bad ones. In a way, it was good, as we tried to figure out where they had done well and not so well. As they were not goanna take offence cause you were not worrying anything.

BM58: She didn't seem pproachable, as she didn't really make many comments, and she just handed it out five minutes before the end of the seminar… the lecturer of this module was very approachable, so I would always ask him for help.

'Informativeness' and clarity of communication with students

The effectiveness of the teacher in communicating with students about the course objectives: the purpose of doing things, how clearly the teacher explained his or her requirements and expectations was very important in students' involvement in assessment. About half of the students I interviewed pointed out how important it was to them. From the extracts listed below, it can be seen that students can easily get lost or be confused, as explained earlier, if the teacher is not clear or informative enough.

BM240: Not really. I just followed my own ideas about what would be the best, and tried my best to do all the things that I could think of. Sometimes, the teacher described us or gave us criteria, but it was quite abstract and I did not know how to use these criteria for judging myself. I think it would be good if we could have an exemplar before we did the project, like we do for our dissertation, as we were able to borrow a dissertation from previous students. After seeing their work, I had clear idea of what the dissertation structure should be and what standard was expected.

BM138: [in the other module] Most of time you are just given an assignment and nobody knows what's going on. They just give you a very brief idea, but even the seminar tutors wouldn't know exactly what they are looking for. How are we to know what we are supposed to do if the tutors don't even know?

Whereas, in one of the other modules, student BM138 mentioned that it was quite organised and she was quite sure how to mark the work because the expectations and criteria were clear to her.

BM138: Actually, we've got module handbook. We get the breakdown of the marks and the criteria our exams and essays are graded against. So you do kind of get help in that aspect on the marking sheet. That's quite handy.

BM243: The teacher gave us an article which not everybody really read. It explained to us the rationale of this module design. Because not all of us read this article, she spent a lecture where she tried to get us to come up with different ideas, like brainstorming, on how we would go through it and the process… That's why I mentioned earlier it was definitely useful to have a brainstorming session at the beginning.

So if teachers are more informative about the purpose of each task and give clearer requirements and instructions, it may help students better understand the task. It may also stimulate and motivate students to learn.

BM243: I still think it's a good thing to do, but people really need to understand it more…

BM241: I guess they could have signposted [their expectations of us] better. We should have got more detail about this [expectation] before. I mean, I don't know what we should have said about this [in our report], I guess maybe we should have broken the report down and said, 'we need strong instructions and a strong guide,' I don't know, I really don't know.

Feedback and guidance to students

Feedback from teachers was found to be important in supporting students' learning and also an important motivation for students to be engaged in SIA. The teacher was the role model for students on how to provide good feedback on the quality of work, as one of the students said:

> *BM256: It [the teacher's comments on the group presentation] gave me an idea of how to give feedback, and how to use the criteria.*

Good feedback from teachers also promoted students' engagement with feedback. It was found that informants from module B, where the teacher provided detailed feedback to students, were more likely to make full use of feedback. By comparison, informants from module C, where teachers' feedback was limited, were found not to care about the feedback very much. However, feedback on the student's feedback which would evaluate the quality of the feedback they provided was not provided to students in any of the modules investigated.

Another issue was the emotional impact of the feedback that teachers had given to students. Many informants indicated the emotional impact of feedback could influence their further action with regard to that feedback. Besides suggestions and critiques on their work, encouragement seemed to be important to many students. One of them said:

> *'I really read it in detail. I work very hard, so sometimes even a little praise would make me happy and make me confident, because then I know I am on the right track. For example, I put so much effort into the references, and it is not easy to do it correctly. Finally, in my feedback I was praised for it, and I was kind of satisfied. If I had a poor mark, maybe I wouldn't feel the same, because I worked so hard, and maybe I would feel a bit disappointed. However, I take my feedback onboard; no matter what kind of feedback, I always take it on board.' (BM177)*

5.4.3. Factors from the institutional level

There were many factors from the institutional level which were mentioned by some of the informants, like module organisation, the assessment credit system, the schedule and learning support and facilities. However those factors vary from

module to module, therefore, those specific contextual factors will be explained in each module case study in the next section.

5.5. Conclusion

This chapter has synthesized the main findings from interviews with regard to the main research questions. It outlined the general picture of student involvement in assessment and the associated issues from the perspective of students. From the thematic qualitative findings, it was found that students' perceptions of SIA and the teaching, learning and assessment environment might not necessarily be the same as those of teachers. From the investigation of students' engagement with SIA, it was found that students might not experience the SIA as the teacher expected. It was concluded that the process of SIA and students' learning experiences of SIA needed to be better understood in the context of module settings. In this regard, the following chapters (Chapter 6, 7, 8) of in-depth module analysis intend to provide an inside picture of students' experiences of SIA in a more contextualised way. Their distinctive experiences are portrayed in three stages utilising the 3P model (pre-sage, process and product).

CHAPTER 6 QUALITATIVE FINDINGS II: IN-DEPTH ANALYSIS OF MODULE A

6.1. Overview of Module A

6.1.1. Module Aims and Rationale

The rationale for this module was for students to understand that the effective use of financial information is a vital part of the management process. This module aimed to develop the understanding of financial information for use by managers in planning, control, and performance measurement. The emphasis of the module was to promote an understanding of financial information rather than focus on the preparation of sets of accounts, therefore the module was more practically rather than theoretically orientated . It was designed to be a foundation module for students at the beginning of their studies who had an accounting component in their degree course.

6.1.2. Teaching and Learning Methods

The module was delivered in both semesters, weekly, by two-hourly lectures and one-hourly seminars. In addition to the face-to-face contact teaching, the computer assisted learning (CAL) package was utilised to run in tandem with the course. There was a strong element of self-regulated learning which students were expected to undertake before and after the lectures and seminars, comprising relevant reading and independent online exercises (e.g. quizzes, past exam papers, and examples) . Other than that, the voluntary 'clinics' were organised when there were a significant number of students who were perceived to be encountering problems with aspects of the module. Unlike other modules, the exam preparation in this module started at the beginning of the semester and was an ongoing process.

6.1.3. Module Assessment

The assessment of this module consisted of three elements. The first element was ten online assessments (quizzes) that were expected to be undertaken weekly by the students themselves throughout the semester. Students were also required to record their performance mark on a grading sheet. The ten quizzes counted towards 20% of a student's final mark for this module. The second element was two class tests: one of which covered the first seven weeks' tuition, and took place in week nine; and the other in week twelve which covered tuition from week eight to week ten. Each test counted for 10% of the final mark. The third element was a final, unseen, written examination lasting two hours which comprised 60% of the final mark for this module. In order to pass this module, students had to obtain 40% of the overall marks, and had to achieve a minimum mark of 35% for elements one and two.

6.1.4. Module Participants

This module was compulsory for first year students who had an accounting component in their degree course, and was optional for other degree course students who were in their first and second year of study. There were around 700 students registered for this module in the year of 2008-2009, including both part-time students and full-time students. In the current study, there were eight students from this module who participated in the interviews, and of those eight, seven of them were first year students. There were three mature students who participated in the interviews. The other five were all aged from 16 to 20 years. There was only one part-time student, and only one second year student appearing in the interviews. The following sections are based on the eight interviews to find out students' perceptions of this module, their engagement with SIA, and learning within the context of this module.

6.2. Presage Conditions for SIA in Module A

This section mainly analyses the presage factors that influence students' engagement with SIA. Those factors found in this module are presented from two aspects: one of

which concerns the external conditions perceived by students from this module; and the other concerning the internal conditions of the students.

6.2.1. External Conditions

The Module Content

This module involved lots of mathematical knowledge and skills, and it required an understanding of theories behind the mathematical equations; some memorisation of such equations; and an ability to put them into practice. Most of the interviewed students from this module expressed their satisfaction with the learning content of this module. According to what they talked about most, the appropriate workload and the right degree of difficulty of this module were found to be the most important reasons for students' satisfaction.

- ***Workload and Difficulty of the Learning Content***

Without exception, the students interviewed all perceived the workload and degree of difficulty of this module to be acceptable. No one had any problems coping with the work in this module, and they all found it 'easy'. Most of them expressed a positive attitude towards this 'easiness': only two interviewees used the term 'not challenging', which might not have the same positive connotations of the rest. The extract below shows what was commonly said about this module.

> *BM59:You don't have too much work to do for the seminars, but for all the work in the seminar you don't have the feeling [that] it's out of your depth*.
>
> *BM138: I don't really find the MF, that subject, that difficult… It was good that they taught you stuff that you need to know.*

- ***Relevance and Practicality***

About one third of the interviewees viewed this module as relevant to their future career interests and their lives. Few participants thought this module was more practical than other module they had studied. In general, compared with other two modules, much fewer of the interviewed students talked about the relevance and practicality.

BM70: I think mainly the stuff from this class was useful to life. Some of my other classes were kind of pointless because you didn't have a sense where it came from, and it just did not make any sense to me.

BM26: Like, sometimes when you read in the newspaper, and you would wonder what does this mean, for example, the G20 Submit reported recently. When you are studying in other modules, you are still studying there, but you are not using your brain very much anyway. So you are still getting knowledge, but it is not like your own work. Whereas this module you have to do the calculation and work it out yourself.

Module Organisation

Unlike other modules, and without exception, almost every interviewed student was quite positive about the module organisation, which might be part of the reason for students finding it easy to learn in this module. When informants were talking about their experiences in this module, they always made comparisons and contrasted it with other modules they had studied. For example, when student BM138 was asked how she found this module in general, she said:

BM138: I think that was one of the better run modules I've had. It developed quite well and was more organised. They had lectures and then seminars which are very good. Our seminar teachers are definitely very good. It is well organised, you've got two lectures every week, and had your seminars as well, so if you had questions you can ask them. Also you could email the teacher, or make an appointment to meet with them if your question took longer. They are usually quite efficient in dealing with any problem you have.

BM88: The format was sort of, like engaging. I found the structure of that particular module was good, because for some of the other modules I did, I'd say it wasn't as good as this one: for example, the assessment criteria, the assessment tasks and methods, and such things.

As student BM88 said, what made this module well regarded was what Biggs (Biggs and Tang, 2007) had discussed: the two alignments. One was the alignment of teaching activities and learning activities, and other one was the alignment of learning objectives and assessment.

- ***Alignment of Teaching and Learning***

Interviewees identified that the teaching methods of this module were complementary to each other in terms of the learning content while also supporting

each other. For example, in the lecture with over 300 students, it was difficult to have a group discussion or do problem solving. However this was possible in the seminar after the lecture each week.

> *BM70: The tutor would go through the workbook with us after each lecture. We could ask questions if we had problems. There was more discussion between us, and it was very helpful.*

> *BM88: The lecturers and seminars are really important, because the teacher there will give very useful information which you cannot find on the handout. If you had a problem with some of the questions, and you cannot work it out, then they would explain it to you, break it down, something like that, which you wouldn't get from the lecture. You just get told in the lecture, so the seminar was like an extra additional help to understand by seeing how it should break down. It's like a class of 18, and we discussed it together. It's a very good opportunity to clarify things and raise problems you have.*

- ***Alignment of Learning and Assessment***

The alignment of learning and assessment in this module is evident, as indicated in the previous module overview, where continuous assessment was utilised. Most of the informants indicated their appreciation of such an assessment strategy, and were positive towards it.

> *BM70: There are tests throughout the semester, and you are working all the time, not like the others where there is only one exam at the very end, so you could get overworked. I think the online quiz and class tests prepared us for the final exams.*

> *BM138: A lot people attended the lectures, and, pretty much, I think almost all of us attended each seminar. I think it was better run, more smooth and easier, and better at helping students, and so the students put in a greater effort. Whereas, on the other hand, if it's not, the student obviously will feel dejected, and therefore not bother with it.*

This module was quite popular among the students at the beginning of their studies, and the attendance of lectures and seminars were both very good, as student BM138 described. The well organised curriculum and the alignment of teaching, learning and assessment clearly contributed to the popularity of this module. This finding confirmed what Biggs and others had found with regards to the teaching-learning environment. With regards to the continuous assessment strategy, most of the interviewed students said they were in favour of it.

BM70: It's a good way to make yourself study as well. Otherwise you just leave it until the very last minute. So in this way, it makes you tackle them. It's hard to not cheat on them, (laugh…) but I am trying my best.

BM 70: [I] liked the smaller tests, like continuous tests rather than a one-off exam. Our scores in the module were from three different kinds of tests, not only from the final exams.

Other External Conditions

Some other students also mentioned other external conditions which could have influenced their engagement in SIA and learning in this module, such as the resources and equipment; social relations within this class; the lecturers' teaching styles; and available choices.

BM70: The library, and the online learning resources. Like after the lecture, we can always download the readings and lecture notes from online.

BM88: This class is very friendly. I am the student rep of my class. I always have lunch with some of my fellow students. Also, most of them like to share their opinions with me. I don't know why - maybe because I am older, or maybe because every time I get prepared for the seminars.

BM07: I think the lecturers in this module were really good, especially Ben, he has a very good sense of humour and the teaching is not boring like the others, but it kept us really interested.

BM59: And also you feel the book you used was really helpful. You know, I'm really glad that I bought the book, because it's really helpful for my knowledge and helped to improve my knowledge of the course.

Except for those good points that interviewees had identified, there were some other aspects that could be improved to make this module better, such as more choices for students, or a greater opportunity for students to voice their opinions regarding the teaching, learning, and assessment. In addition, equipment and resources were also important factors that allowed students to engage with SIA and their learning.

BM70: We did not really have much say or choices in this module, but we did have an evaluation form to fill out once we finished this module. I wonder whether they will take into consideration what we said.

BM88: Just the equipment in the university, like, it would be good to have more access to PCs, as we use online systems a lot, and sometimes when it's busiest, you cannot get even one PC at the university.

6.2.2 Personal Conditions

Although individuals' personal conditions were complex and diverse, there were some general categories with which students' personal conditions relating to SIA could be identified. Students' prior experiences of SIA, and their beliefs and understanding of both the assessment and SIA were found to be a general theme in the interview data as presented in the previous qualitative findings chapter (Chapter 5). Besides these two general themes, interviewees from this module specifically talked about their motivation for studying this module and their personal circumstances during their time studying.

Students' Prior Experiences of SIA

It was known that most of the students taking this module were first year students who had just left secondary schools and begun their university studies. Therefore their perceptions and engagement with SIA were influenced by their previous different learning and assessment experiences to some extent. Their prior experiences of SIA may have been limited, or may have been negative experiences.

BM70: I don't know. I didn't do so much essay writings until now… and I have no idea about peer assessment.

BM138: We have a module like this in this semester actually. It's a bit of a joke really, because some people were sitting there, and just weren't filling any things in during the time. So they passed their paper to their mate, and their mate would just mark their paper while filling in the answers for them.

BM26: In fact I had one such experience back in my college in one subject where we did peer marking. Then, the person who was marking someone's work might have some personal bias, like if they were not getting on well they might give you a lesser mark to de-motivate you. The problem was that the teacher did not know why these were the marks being given.

Either lack of experiences or negative experiences in SIA seemed to result in the students' negative views towards the peer assessment. For example, most of the

interviewees who had negative or no experiences of peer assessment were not positive when they were trying it. Like student BM138:

> *BM138: I think it's quite hard for students to mark other students' work on a fair basis. Just because I wouldn't think I am qualified enough to do so, considering I am a student as well, and I am not really specialized in a particular field.*

There were only a few interviewees from this module who seemed to be interested in trying peer assessment, and they were all mature students who had substantial previous work experience, during which they might have experienced such a practice.

> *BM59: Before coming here, when I had my job, I was the supervisor. So I had to evaluate my peers' work, and obviously I had to review their performance. I think that helps a lot, especially in the group work. You can find out how you can improve yourself as well. We haven't done so here, but I think it would be good if we had this. I think it is always good to see others' work, and what you think about it.*

Beliefs and Understanding About Assessment and SIA

It was found that interviewees in this module had similar beliefs and understanding of the assessment and SIA. The first similarity was that most of the interviewees from this module thought they would gain more knowledge and be able to more efficiently prepare for the exams, though they were all well aware of the pressure that is brought by exams. However, according to what student BM59 said about the reason for this, the impact of assessed tasks on learning was for quite simple reasons. Students like BM59 just focused on the time put invested, but not the learning processes or depth of understanding required. Their understanding of efficiency was based on the quantity rather than the quality of learning.

> *BM59: I think you probably learn more from exams, because it is a more extensive process, and you spend more time preparing for it. I, myself, would spend 8 or 9 hours preparing for the exams, or even more than that when the time got closer.*

> *BM70: You learn more from exams… The exams normally cover the whole module, but essay questions are just about part of the module.*

This simplistic understanding of assessment and learning was also evident in their understanding of the assessment result. Their responses focused on the 'mark' only. However, few of the interviewed students were aware of 'untrue' side of the mark.

BM70: If you get a higher mark it means you have put in a lot of effort into your work. For example, last semester I worked a lot on this module, and I got a higher mark. But, you cannot say a student is not capable just because their mark is low, as in this particular instance they may not have intellectually applied themselves fully.

BM89: In a lot of cases, the mark will indicate whether you actually engaged with it. There are some people who will get away with it, by just doing something right before the exams, and you know, maybe get even a higher mark than me, possibly. However, whether they can do so well in the whole subject and get good marks every time is another thing. As I said, some people are good at something, and some people just get lucky I suppose - especially with the multiple choice questions. So, the mark cannot tell you everything, but it is important for a student.

There were three interviewees (BM59 and BM88) who emphasised the emotional aspect of the assessment results, interestingly, concerning both the feedback and the numeric mark.

BM59: I would like to have more positive feedback, like suggestions for later performance, and not only the weaknesses. Also, it might be good to see some encouragement as well. Especially in this year, you know. Sometimes, you don't know if you are doing alright or not.

BM88: It's kind of nice to hear praise, even if it was just in an email, as it motivates me to keep performing like this.

BM138: It's kind of encouraging…. If you get a bad mark, you would be disappointed.

The second similarity was their false perceptions and lack of understanding of the peer assessment, such as peer marking or giving peers feedback. Most of the interviewees did not fully understand the purpose of peer assessment, but paid more attention to the validity of the mark awarding process itself, except one (BM70), who also mentioned the confidentiality of someone's work.

BM40: It still depends on the kind of tasks. If it was multiple choice questions, and you know the answers, it would be fine. If it was written work, you need to see whether they have understood your writing properly. I mean in this case, it's better to get the teacher to check…I don't think this would happen in our modules, I mean the lecturers would worry that we might give our friends a better mark, or something like this.

BM70: I haven't done this (peer assessment) so far. I think others' work is kind of confidential really. I think this also may be a motivation for us to work harder, because you've got someone else who is going to see your work. For me, I would try harder and try to do better.

This might be why most of them felt that it was acceptable to do the self-assessment, like they did in this module:

BM88: There was another module where we had group presentations, and it was group marked - stuff like that - which I found having personally gone through it, that it was quite unfair, because not everyone put the same weight into the group project. Whereas in this module you would be marked on your own merits, and that was a much fairer way to assess someone. I suppose it's much better than relying on somebody else's work.

Students' Motivation for Studying

Unlike interviewees from other modules, interviewed students from this module talked more about their motivations for studying, more specifically when they were doing the online self-assessment in this module. It seemed that students were driven both by intrinsic motivations for learning, and extrinsic motivations concerning the mark. For example, with the same student BM59, there was evidence of both kinds of motivation. However, they were not necessarily contradictory to each other. Both external incentives and intrinsic motivations were essential to students' engagement with the learning and SIA.

IR: Is the mark or grade important to you in your study?
IE: Yeah, very much, very much so! Again, I always try to achieve as much as I possibly can, because I gave up so much by coming back to university. I should have a stable and good job, but I decided to come back to university to study in the middle. I want to put as much effort in as I can, so want to achieve as high a grade as possible. (BM59)

IR: So, what is your aim? How do you intend to get a higher mark?
IE: To put more effort into my studies; try to develop my skills here; always read the feedback I get; and just get as much as I can from here, and from this time here. (BM59)

IR: If you were an employer looking for a graduate employee, what would be your criteria be for employing a graduate?
IE: First thing, I would look at their academic performance, because it obviously is the most important thing to make sure they have done the work at university, and how relevant it was to the kind of business I am involved in. Also, I would look at their personality traits, like confidence and the ability to

communicate. I think that is really essential, as well as their presentation skills, and ability to analyse information. These are some skills that you might not see on the CV, but you need to see the person and speak to them to get that impression. (BM59)

Other Personal Circumstances

The personal circumstances appearing among the interviewees taking this module were mainly from students who were full-time working students while studying, and the mature students who had substantial work and life experience. In contrast to most of the interviewees who found this module easy to cope with, two students (BM59 and BM07), who were working extensively while studying full-time, found it a bit difficult to organise their time properly. However, the other special circumstance in which mature students had come back to university with life and work experience were found to be at an advantage when it came to learning and engaging with SIA, like student BM88, who was the student representative of his class.

BM59: Before I got a job in November, I read every chapter before each seminar and lecture, so going to the seminar and lecture would help me to make more sense of the book I had read. After the seminar and lecture, I would go back to the chapter and read it again to understand it. But since I got a job, you know, I was kind of running out of time…I felt that around the time of the deadline it was a bit of a rush, as sometimes you would spend half an hour just filling in all the quizzes. It was because of the deadlines that you had to do a certain amount of exercises in a certain amount of time. I was trying to fit the online test in with my own working life as well. It required us to finish by 3pm on Friday, and I always work all day on Thursday.

BM88: I would say being a mature student is an advantage for me. I have a more mature attitude towards studying. I came here because I wanted to come here, not because my Mum or Dad told me so. I came here because I want a different career, and if I don't do the work then I won't be able to do the career that I want, and then there's no point in being here.

It was found that a constrained time schedule resulted in poor engagement in the self-assessment and learning, while being a mature student with substantial work and life experience could be an advantage for greater learning and engagement with SIA.

6.3 Process of SIA in Module A

6.3.1. Students' Engagement with Online Self-assessment

There were two main distinctive features of students' involvement in assessment (SIA) in this module, which made this module different from the others. The first was the online self-assessment. It was suggested that both teaching and learning could benefit from the use of computer-aided assessment (CAA) (Bloxham and Boyd, 2007; Falchikov, 2005). For practical reasons, the CAA normally could mark and provide model answers automatically, so it saved teachers' time and resources. For the students, it also provided them with timely feedback on how well they had done and how much was required of them. By looking at extracts from this module, those practical benefits are evident.

> *BM26: Once you've done the test, the system will tell you your total mark for this attempt. Then for the questions you got wrong, the system will direct you to the right answer.*

> *BM 89: It generates the mark straight away, and also shows where you went wrong. It was quick. In other modules you don't get that, you just sit in the exam, write on the paper, and get a mark at the end without knowing where you went wrong, or where you could improve for next time.*

Most of the interviewees also noted that the online self-assessment could help them for more regular learning, as participant BM40 said. However, how well and how deeply such external regulation could enhance the learning experience was not as apparent as the practical benefits. Some of them had a superficial approach to the self-assessment, as informants BM07 and BM70 did.

> *BM40: I think they are good from the point of view that it makes you actually go to the book and read it. But in terms of assessing what you know it is a bit of pointless exercise, because you just get your book, open it and read the answer, and no-one knows how you did it.*

> *BM07: I just handed it in last week. I was a bit lazy for that one, and left it until the very last minute. I tried to just finish the essay two nights before the deadline. That's why I thought the online test was a good way to make us work through the whole semester.*

> *BM70: It wasn't that bad because you did not have any pressure. I was very tempted to open the book and look for the answer because there's no one*

watching you. I tried my best to do the review first. ...It's hard not to cheat on them.

There were some students, like BM26, BM88, and BM59, who showed a conscientious approach to the self-assessment. They did the online quizzes to revise and understand the learning content, and make use of the information generated online to adjust their learning.

BM26: Normally I would check in the book or go to the lecture slides and try to look for the right answer and then try to memorize it. If I couldn't do that, for example if it was a mathematical one, I would look for the equation for it and try to memorize it.

BM88: I did not do any revision, and I started off very close to the deadline when I was going to revise (…). I actually wanted to see how much I really knew. As I said, I did get 90% for the first time, and I just did it like that every time. I'd been to the lectures, and I'd done the work and reading for the seminars, and so I just went straight for the online quiz to see how much I could get.

The second significant feature of SIA in this module was the dual roles of self-assessment for both formative and summative purposes. There was an element of summative purpose in the self-assessment, not only because there was a mark awarded, but more importantly the students were supposed to test themselves on how much and how well they had learned the material after each section of teaching. At the same time, these online quizzes were also expected to be taken as preparation for later class tests and the final exams. In fact, students did it for both purposes. For example, BM26 did it for formative purposes, while BM88 did it without revision for summative purposes. The extract below from interviewee BM138 discusses the importance of the summative element in the self-assessment. The example she gave indicated that the formative purpose of self-assessment might be limited by the lack of the summative purpose. She experienced in a module when students were lack of self-regulation but with greater autonomy in assessment failed to encourage deep learning. Boud (2000) argued for the significance of the dual role of assessment played in students' learning. Informant BM59 was a good example to show what student did in the process when the both purposes were supported to each other.

BM138: I think continuous assessment is good as a way to support learning for the final exam. I think MF is quite good because we were constantly

reminded of what we'd been over. It kind of forces you to read the book and learn the theory. So when it came to the final exam, I kind of knew it already, so I just needed a kind of reminder to make sure I knew everything for the exam. ***However, I don't think the continuous assessment works in a situation where there is no final exam.*** *As I told you, in the module which I am doing now, there are only ten separate online tests, and no final exams. Because you can get your book and do it for yourself, and nobody cares so they just turn to the book to look for the answer and type in. It's absolutely pointless! Whereas when it's kind of used alongside the final exams it works well.*

BM59: I thought about myself and the process again. As this one was the lowest marks I had got so far, I was a bit disappointed by this. I thought the main reason was that I hadn't put in as much time as I could have, which I hold my hands up for. Now I am looking back at the essay, and obviously I plan to go back over the subject and work on the areas where I could have put in more details. Because I'm sure it will come up in the exams later, so this could obviously help me. Again, I also would go back over the essay and look at my structure. I know there were not that many [comments] on it, but I will look how I could have better structured my thoughts and made my point better.

6.3.2. Support for Student Involvement in Assessment

Interview participants from this module largely talked about the significant role of the teaching staff. Most of them showed their appreciation for the quality and prompt support they got from the teaching staff, either in the seminar class or after class. Most of the support was related to the academic difficulties they encountered in assessment, especially with the online quizzes. It was found that students were not left completely one their own with their online self-assessment. Even though there were model answers provided by the CAA, teachers were always there to help in a variety of ways, such as seminar problem solving, talking clinics, or informal chatting.

The Teacher's Passion and Willingness in Helping Students

The quick response to students when they were seeking additional feedback was probably an important factor in influencing how well this module works.

BM59: I remember one time I had some problems with the online questions. I thought I answered correctly, but the system marked me wrong, so I emailed the lecturer for help. Just the next day, he got back to me and explained it to

me giving every detail. He also forwarded my message to the rest of the group, so others could benefit from my question.

BM40: The good thing was that they gave the paper back to us so we could see where we went wrong. We could go to the teacher and talk if we wanted.

BM88: I was asked about a case study from a core textbook, and I asked him which chapter I should be looking at in this case. He told me immediately and very clearly.

Personal contact was seen to be important for the students at the beginning of their studies at university, especially for the first year students who had just come out of secondary schools where they were used to getting much more personal contact and individual help from their teachers.

BM70: The majority of teachers here won't get close to you or get to know you very much, but there are some teachers, like one of the ones in another risk management module, who we got to know very well. This is probably because of the huge class size, and because you don't get the time to speak to them individually… Most of them are there to help, but most of students don't go very often. I think this is also because our relationship is not that close, so we don't go and ask like we used to in school.

BM88: The module leader was very supportive and approachable. I liked the module leader. Even in such a big module with over 200 people, he knows my name and remembers me, and I only did one module with him. Like, last semester, after one of the class tests, he emailed me to say, 'congratulations, you did well', which I found very nice, you know.

For students, the prompt response and some personal contact was indicative of the teachers' passion for teaching and their willingness to help students. Students could be motivated by such care in teaching. More importantly, with the help from a teacher, students were encouraged to improve their learning with the additional information they received. For example, interviewee BM59 compared his personal experiences of two different teachers with different attitudes for helping students. He specifically emphasised how important the additional information about the mark was, saying that otherwise a solely numeric mark would be meaningless.

BM59: I don't know if I could talk with the teacher on the other module, to be honest with you. She doesn't seem to be approachable as she didn't really make many comments, and she would just hand it out five minutes before the end of the seminar. She is different from the lecturer we had on this module [the MF]. You know, I told you that the lecturer from this module was very

approachable, so I would always ask him for help. But she is just not as nice as he is, and you can tell this from her manner when she is speaking.

BM59: The lecturer sent me an email after I got my results for this module. He said, 'very well done!', which I was really pleased to hear. That made me feel good about myself and this subject as well, because I did not realise my mark was a good mark. I thought everyone had got the same high mark.

Teacher Training and Development:

Among all of the interview participants across the three modules in the sample, two interviewees from this module were the only students who mentioned teacher training and development issues. They experienced or noted the different level and quality of support from individual teachers, especially student BM138, who highlighted the issue of some inexperienced tutors who were newly appointed.

BM88: The seminar groups probably should have been given a sort of standardised support. Like if one group's tutor was not as good or supportive as another group's. I mean, I know it's difficult to make every group have the same tutor, but it would be good if there was a kind of standard. I am not complaining about this, but some students I know had a problem with this.

BM138: Because there are all kinds of new modules, and the seminar tutors are new, [they] don't know what is going on, and you get sick of it. Like for an assignment question, if you ask them, they just give you a very brief answer. Sometimes even the seminar tutors don't know what exactly they are looking for. How are we to know what we are supposed to do if even the tutors don't know. But for MF, in this module, at least you know what you are doing and everything is well explained.

6.4. Products of SIA

6.4.1. Academic Performance

Unlike other modules, because of the nature of the assessment of this module, it was easier for students to compare their academic performance according to their test marks. For most of the interviewed students, marks from the online quizzes, class tests, and final exams were quite consistent. Most of the interviewees accounted for their success in the final exams by their effort on the online quizzes. They thought the quizzes prepared them for the final exams both academically and psychologically.

Some interviewees found they were not as nervous as they had been in the past in exams, as they felt they were prepared and had that extra confidence.

> *BM70: They were quite consistent. My average online was about 70; 75 for the class tests; and 73 for the final exam. The online tests definitely made me successful in the final exams.*

> *BM88: I was revising for my final exams. It gave me a lot of confidence knowing that I always got over 75%. I think most of my marks were quite similar, right through the whole thing, including the online assessment, the class tests and the final exams. There were no big drops.*

> *BM59: I want to point out that studying past exam papers was really, really helpful. Although I was more nervous sitting in the final exam, I was really confident when I went into the exam room, but not as confident as the class tests and the online quizzes, obviously. But still, I would say I was fairly confident as I knew I had put a lot of effort into it, like, I did the online tests regularly and got good marks in both the online and class tests.*

6.4.2. Attitudes towards SIA

As the majority of interviewed students were very positive about their experiences of the online self-assessment incorporated into this module, most of them had positive attitudes towards self-assessment with an appreciation for having some kind of control on their time. Interviewed students also valued the formative function of learning in the self-assessment.

> *BM59:From a student's point of view, I would say, for the online tests you could probably work at your own pace, and you could find out your mistakes. Also the class tests, like the continuous assessment, would be more beneficial than the final exams.*

> *BM138: I think continuous assessment is good as a way to support the final exam. I think MF is quite good because we were constantly reminded of what we'd been over. It kind of forces you to read the book and learn the theory. So when it came to the final exam, I already kind of knew what had been done, so I just needed a kind of reminder to make sure I knew everything for the exam.*

6.4.3. Other Transferable Skills for Longer Term Learning

Unlike other modules, interviewees did not talk too much about their assessment skills. However, this did not mean there was no student involvement in assessment. Students were not involved in marking directly, but they were involved in decision-

making at other stages in the self-assessment, for example with time, and how they could make full use of the quizzes. In this regard, students were more aware of the development of their learning skills rather than their assessment skills. For example, some informants indicated they had learned time management, and some of them learned to how to discipline themselves for future learning. However, as student BM70 suggested, there were limited chances for students to practice other transferable skills, such as presentation skills or communication skills.

> *BM40: That's what I found was quite good about the online quizzes in MF: because it gave you hands on experiences of doing things, like how to organize your time properly.*

> *BM 89: The weekly self-tests taught me one thing: that it was better to prepare early and throughout the semester, rather than leave it to the end… I think I will do it like this.*

> *BM70: It was the first module I did when I started at this university, and now I know I can do it. It also motivated me to learn in this semester. All the stuff we learned would be useful for my career. Nothing else, as we don't have much presentation stuff like this. Most of the time it is about learning by yourself and doing the review and online tests. So maybe just computer skills.*

6.5 Conclusion

Overall it was found that this module was well received by interviewees for its well-organised pace of learning for students, and the welcoming support for students from the teachers. Self-assessment and continuous assessment were the distinctive features of this module, which successfully integrated the formative and summative process of learning. Although students were not heavily involved in decision-making in the self-assessment aspects of this module, they appreciated the flexibility of the self-assessment and the opportunity for reflection on the learning process. Although evidence of students' development of assessment skills and an enhanced deeper learning was scarce, there was substantial evidence indicating that most of the interviewees in this module had developed a reflexive manner in their learning by doing the self-assessment. In general, most of the interviewed students in this module used quite positive words, such as 'enjoyable', 'good', 'practical', and 'smooth' to describe their learning experience in this module. The extract below from student BM70 summarises the commonly perceived experiences of this module.

BM70: I actually found it quite enjoyable overall, but I'm not sure if it was the same with everyone. I think the online quiz and class tests prepared us for the final exams.

CHAPTER 7 QUALITATIVE ANALYSIS II: IN-DEPTH ANALYSIS OF MODULE B

7.1. Overview of Module B

7.1.1. Module Aims and Rationale

This module aimed to develop students' ability to understand and analyse the inter-relationship between strategic analysis, strategic choice and business performance. According to the information in the module handbook, it built on the knowledge that students had gained at levels 1 and 2 of undergraduate studies in relation to the external business environment and functional levels of management. In this module, students were expected to develop the research and analytical skills needed to investigate how external and internal factors influence strategic decisions taken by organisations. Students were also expected to develop an understanding of how strategic choices taken in an increasingly dynamic and hypercompetitive environment contribute to an organisation's performance. While gaining an understanding of the complexity and integrative nature of business policy, students were expected to further develop their employability skills by working in a team to plan and deliver their own research and a presentation of their research work.

The learning outcomes of this module covered both knowledge and skills. The knowledge and understanding of the theory and the critical analysis skills in the practice of strategic management were expected to be acquired through full and active participation in the work of this module. In the process, students were expected to gain both research skills and interpersonal skills associated with teamwork and presentations that would be valuable throughout students' future academic and professional careers.

7.1.2. Teaching and Learning Methods

The teaching and learning in this module involved a variety of methods, including lectures, seminar tutorials and online seminar forums, team work, and independent learning activities. Lectures were used to communicate the key concepts, theories, tools and techniques which students needed to understand in the subject area to successfully complete this module. The lectures were front-loaded once a week during the first 8 weeks of the semester to ensure students received a suitable overview of the syllabus prior to undertaking seminars and their own research and presentation tasks. The seminar each week was composed of a range of short case studies and exercises that had been designed to allow students to develop their understanding of the concepts and models introduced in the lectures that must be applied to their company analysis in their research work. It also provided students with an opportunity to get feedback from tutors and peers on the research and analysis undertaken in their teams that would feed forward into their later assessment work.

The online 'blackboard' VLE was used both for module-wide information exchange purposes and to facilitate 'private' seminar group support and team work. The private seminar group areas contained discussion boards, file exchange and communication functions which were only accessible to the particular seminar tutorial class members, seminar tutors and the module leader. This online area was designed to (a) record the team's progress by posting the minutes of the team meetings; (b) to post a copy of the seminar team presentation; (c) to seek peer and tutor feedback and support relating to the research investigation and presentation performance.

7.1.3. Module Assessment

The module assessment centred around a continuous assessment and continuous feedback approach which led to the completion of an individual portfolio of work that was put together over the semester of this module. This portfolio was designed to illustrate how students had developed their subject knowledge, research skills and critical evaluation skills over time through the completion of a series of individual

and team-based tasks. Continuous feedback provided by tutors and peers on activities undertaken during the semester was intended to enable students to improve their performance as the module progressed.

The portfolio was structured into two main parts: part one was the evidence of participation in team work in seminars and group research work, and reflection upon this group work and research work; part two contained an individual management report (3000 words) based upon the group research that had been done. Table 7.1 is the summary of tasks that should be included in the portfolio:

Table 7. 1: Module B assessment

Associated tasks		Evidence	Weighting
Part One	Group work	• Signed code of conduct • Minutes of team meetings • Copy of peer assessment form	0%
	Group presentation	• Copy of group presentation (ppt.) • Copy of tutor evaluation form of group presentation • Copy of peer evaluation of each other's group presentation	0% 15% 0%
	Self-reflection	• 600 words	15%
Part Two	Individual report	• 3000 words	70%

7.1.4. Module Participants

This module ran for one semester and was a compulsory module for the third year Business and Management programme students. There were a large number of students taking this module in the third year for their programme studies, around 700 students each year, and they were all full-time. The following part will present how students in this course engaged with the portfolio-based assessment where a certain level of involvement was required from them. Seven students from this module participated in the interview, three of whom were mature students. In the following analysis, the 3P model of learning will be utilised to structure the discussion and

representation of students' actual learning processes. The selected quotations were not necessary from the same students each time at the three different stages (presage-process-product), but rather a collection of examples that were seen to be representative of the informants' opinions from this module.

7.2. Presage Conditions for SIA in Module B

This section is looking at the pre-existing factors that seemed to influence students' involvement in assessment in this module. Those themes students expressed can be grouped mainly into two aspects. One aspect is external conditions more specifically about the teaching, learning and assessment environment perceived by students, and the other aspect is some conditions from students' personal circumstances including students' prior views and experiences relating to assessment.

7.2.1. External Conditions

The Module Content

- ***Relevance to career interests***

Almost every student that had been interviewed valued the relevance of the learning content in this module to their career interests. Out of these seven informants, five of them were planning to do something related to business management, and only two students were planning to become school teachers. When asked about the learning content in this module, six of them stated that both the lecture content and the tasks that been given were related to their career interests, and only one student who wanted to be a school teacher found that the learning content was 'a bit general' for her.

The relevance to students' career interests perceived by those informants can be divided into two types. One type of career relevance perceived by some students referred to the actual learning material that had been given. For example, the research

company or case study that had been given to students was related to their career interests. Student BM167 from the programme of Fashion Business, for example said:

> *'We were given a cloth retaining company to research for presentation and writing. So, it was obliviously more interesting and relevant. I think in our seminar class, all of the fashion course students were given the similar fashion companies. So it would be not as interesting as this if we were doing something totally different from our subject.' (BM167)*

The other type of career relevance perceived by students was more general and focused on the skills that they developed in different tasks that had been given, like presentation skills, group work skills and research skills that were all perceived to be useful to their later careers. Most importantly, students recognised and found that this career relevance could really motivate them to learn. One of these, BM166, indicated that this module gave them an opportunity to practice what would be needed in a real work place.

> *BM166: As it is different from other modules, so it motivated me to learn. Also it put you into the real world. As when you go into the workplace, you need to do your research yourself. It is good to get us ready before going into the real world.*

Module Organization

Like the other two modules, two distinctive issues around the module organization were discussed by informants. Students showed their concerns about the clarity of the module objectives and assessment requirements and about the time schedule of this module.

- ***Clarity of module objectives and assessment requirements***

It was rare to see a consensus from informants on the views towards one module, especially on this issue of clarity of a module's objectives and assessment requirement, but, with no exception, informants from this module stated their satisfaction with the clarity of the module objectives and assessment requirements that had been provided to them.

Not only the marking criteria were given to students; proper guidance and feedback were also attached to the criteria (see appendix). Students appreciated the criteria that

had been given. Some students, such as BM 255, found that this was helpful to their preparation, and some like BM166 said it helped her with peer assessment and giving peers feedback and also gave her a better understanding of feedback received.

> *'Also the structure of the course setting was very helpful for us to do the research. It guided me to do the research and the writing task as well. For example, in the handbook, the lecturer says we need to put a positive angle as well as the critical angle towards the negative sides, and I think this actually gave me a lot of ideas on how I am going to research this organization and how to present my findings.' (BM_255)*

> *'We've been given a form with all levels of criteria, for presentation also we got some guidance of what should be or not, like we were limited to have ten slides each. I certainly followed the guidance when I gave the comments to others' presentations.' (BM166)*

> *'I took the module handbook with me when I was reading the feedback, and the main thing was the conclusion needs a bit work to do, and I think that was something I picked up a lot of.' (BM166)*

From how the students spoke about this issue, the teacher's communication with students about the criteria was found to be another important reason to reach such high levels of student satisfaction with the clarity of expectation and requirements from this module. The teacher would explain to students what those criteria and requirements mean, like BM176 said:

> *'She came to present to us what was a good report and what was a bad report. You had to reference your work, you had to be academic, and had to include everything that mentioned in the guidance of our handbook… S. who was the module leader wrote the guidelines on how to write the self reflection in the module handbook. It was just about how you conceive the whole presentation, and the whole process of learning and your experiences. So it was broken down in pieces. On each question, you have to give reasons on how about your contribution, what was your experiences, what do you think you could have done better, did you find everybody was giving full effort. …' (BM176)*

Students from this module I talked to, with no exception, seemed to be more clear about the requirements from the teacher and had a better understanding of what makes a piece of good quality work. Most students perceived this clarity to be one of the strengths of this module. However, this clarity of requirements was valued differently by some of the students in terms of autonomy associated. This will be discussed later in the section about the nature and extent of SIA.

- ***Time issues***

With regards to the module organization, the main issue that students to be problematic for them to be fully engaged in the designed involvement in assessment was time. However there were three different time issues embedded in the module design. First was the time schedule of the module. Four students remarked upon the inappropriateness of the group activity in the third year. Take student BM117 for example; she said:

> *'I don't think it would be a good year to place people in a group in the 3rd year, because it is such a busy and important year, and it is such a complex and time consuming process for the group work. I think 1st or 2nd would be better to push people to work with others. 3rd year's score will be taken into the fourth year, so if anything happens, it would not be fair, and you have no control of the situation.' (BM117)*

It was clear that the students like BM117 were concerned about the risk of losing control of their own grades, as it was well understood by students that every grade of third year would influence their final degree. Besides, she also included the busy schedule of this year in this inappropriateness of time. For her, this was a possible reason for people not being so interested in SIA at this module.

However she also realised that the level of knowledge was also important for a student being able to do the SIA. In this sense, the third year might be a good level to introduce SIA to students, because students would be able to do so.

> *'I mean for this course, about the research process is a kind of responsibilities we have to take a lot, for example the research methods, aims, and outcomes. For your question, I think students can do this only if they get enough understanding and know enough about this subject. I mean if you are asking a 1st year student to design their own assessment work, that would not be possible.' (BM117)*

Only one informant complained about the time allowance that was given for some tasks, because he did not have such a short presentation before. In the interview he said:

> *'We've got only 20 minutes for four of us, but there was a lot of information to cram into the 20 minutes… Like if you have worked so hard in the library but you don't have time to do it at the end… I think I am pretty good at talking in presentations, but with this module, having four people taking in total of 20 minutes it's like five each, and you need to cover the whole story of the company. I mean it was difficult with such a limited amount of time for us. In all other presentations, it does not matter if it is a single presentation or a*

group, you just get a whole hour, like a seminar for yourself to discuss what you prepared.' (BM168)

For this student, opportunities to practice with feedback might be helpful for him to overcome this disadvantage. Therefore, in order to gain students' full engagement in the designed SIA, the module should be designed for the right level of students at the right time.

The nature and extent of SIA

- ***Student involvement in giving feedback***

Student involvement in assessment in this module was largely focused on peer evaluation. Students were required to do two kinds of peer evaluation. One of them was peer evaluation within their working group about each member's contribution and effort to the group work (see appendix ii), and the other one was peer evaluation of other groups' presentations (see appendix iii).

As can be seen from the form (see appendix ii) that students had to fill in, the peer evaluation form within their working group asked students to review each member's team work in terms of attending agreed meetings, carrying out agreed individual tasks, and supporting each other. Although it asked to give a percentage mark to each team member, it was in essence feedback on the amount of effort each student contributed to the group rather than peer marking of each other's quality of work. The teacher designed this to be the purpose of peer monitoring, and students also perceived this peer assessment in the same way:

BM168: But the mark would not be accounted into the final mark of their presentation, as I think it was just a sign, like to let the students know that other people are looking over you, so you can kind of work harder…

However, the other peer evaluation of each other's group presentation was actually asking students to comment on the quality of each other's work. To conclude, students were involved only in contribution of peer feedback in this module rather than peer marking, and this was perceived as a better way according to the students.

BM166: I think that (giving each other feedback on presentations) was better designed than the peer evaluation within a group. 'Cause if you are assessing someone with informal feedback, and people's grade will not affected by what you say, then people will get a chance to think what could have been done better…I think it's ok to give people feedback to suggest what's been bad and good. If you start with giving people a grade, it could cause problems.

BM117: The peer marking might give somebody a mark which was not well reflected in their work. In this respect, I am not that supportive of the peer marking. Well, for the peer feedback giving, I think that's great, because it is kind of a constructive way of learning from each other. For marking, no, it could be biased mark, and I know this happened.

- ***Students' self-reflection***

Another feature of SIA in this module was that students were required to do the self-reflection on their performance in this module. Students were required to reflect both on the quality of their learning and the quality of their completed assessment tasks. More specifically, in the handbook requirement, students were given detailed structure and specification that need to be included in their self-reflection report on those three main areas listed below:

- Part one on team development, peer support and peer assessment.
- Part two on presentation strengths and weaknesses.
- Part three on learning in general.

- ***Assessment choices***

As can been ascertained from the previous introduction of assessment and module organization in this module, there are various assessment tasks set by the module leader. There were also very detailed and structured requirements provided in the handbook for students, from lecture content to seminar discussion, from presentation criteria to essay structure. Every single activity and task was defined clearly and specifically. On one hand, the content that had been discussed in the previous module organisation section was recognized by students as being beneficial because they were guided by such detailed structure; on the other hand, some students found this module to be too structured to be flexible and to allow for some student autonomy. A

few students were talking about the lack of autonomy in terms of choices of group members and research companies, like BM166 and BM168:

> *'Only thing was we did not have choice on the team members and company worked on. If we had more choice on those, that would be perfect. Other things were all good.' (BM166)*

> *'Everything was set by the teacher, like the group members and research companies, and the focus of the researched company… I think I would rather like to be given a category but choose a specific company by myself. It would be a lot easier to have a company which we were familiar with.' (BM168)*

Also there were two informants who mentioned their strong concern about the lack of autonomy and flexibility in developing their own ideas in the essay writing because of the prescriptive nature of the requirements.

> *BM166: Despite this, I think this module was so structured that we did not have so many choices there. Like for writing, it even gave us a detailed structure requirement like you've got to have this, this and that. So we were like following the outline to write. I'd like to write myself with my own structure, as I may want to say something else. We were also given a specific company and the areas we needed to look at. So, it ended up with everyone looking at the same things, and everyone's writing was a bit similar. I think it would be better if there was some different things we could look at or we could put in something we were interested in or our own perspectives. For example, with the presentation, each of us could look at a different perspective, so it would end up with different presentations rather than the same.*

> *BM255: Everyone was submitting similar work, as the structure of the essay and assignment was defined in too much detail by the teacher.*

This structured assessment task might de-motivate students' engagement with assessment tasks to some degree as student BM166 viewed:

> *'As negotiation makes you feel you are involved. As long as students feel that they are involved, it will help to motivate them more. If you ask them to sit there with no choice, they may not even bother to do it.' (BM166)*

7.2.2. Personal Conditions

Students' Prior Experiences

In this module, there were two groups of students that had different previous learning experiences. One group was those who had been studying in this university from 1st year until now, and the other group was those who joined from the 3rd year. Therefore to the latter group of students, this module was actually their first year of university learning experience. Therefore, for this group of students, their past working experiences were found to be a significant influence on their learning and participation in SIA. This is shown by those two students described their lack of confidence at the beginning.

> *BM176: I think having been away so long, when I came back after ten years everything had gone out of the window. It's like starting all over again…*
>
> *BM117: My parents did not go into further education, and nobody in my home went to university. Also because of nobody has gone to this stage apart from me, I was kind of nervous about if I can do this.*

However, having worked before also had advantages for their learning, like both BM176 and 117 could relate to the workplace more and tried to apply their knowledge.

> *BM176: About the presentation, I liked it, and enjoyed listening to others. Because when you go out for your work, you also have to present, and you have to sell your skills. So I think it's not only for helping to pass the module, but also for work experience.*
>
> *BM117: When I am studying, like reading a chapter and I am really into it, and my mind starts to wonder applying something else on this, like that actually relates what, blab blah blah. I tend to find out the relations to what I know and connect them together. I can't just read it and take it into my brain without thinking of those. That's how I learn. I know someone can do it very well with scanning, but I can't.*

However, those students who had been in the university from the beginning would find that this module was nothing different in terms of assessment:

> *BM168: Not really (different from previous modules I had experienced). They all have kind of similar organization, like presentations and essay writing…*

It was kind of ok, as we got used to doing this kind of group work for three years. So was the presentation, but not with the research stuff. We hadn't done anything like researching a company.

Students' beliefs about teaching, learning and assessment

- ***Teachers' expertise and authority***

Students' prior beliefs in teachers' expertise and authority were found to exist in most students' views on responsibility for marking and judgment. Almost every informant indicated that only the teachers were qualified enough to do the job of marking, but not the students.

BM166: I don't think that it's a good idea, as I don't think we are qualified enough to give someone a grade.

BM167: Obviously the teacher would know what they are looking for and they would be the best and most professional to set the criteria.

BM176: I always think personally, the lecturers and tutors, they know better. So, they tell you A, then it's an A.

This view strongly challenged their trust in peers' judgment of their work and other SIA activities - like what BM177 said about how she would see peers' feedback - though she did say earlier that she was confident in herself about giving her peers quality feedback.

BM117: I probably would not pay much attention on this, because I don't think they really know what they are talking about. I think most of the comments would not be on the content, but on how I delivered the presentation. Do you know what I mean? I think their comments will be more focused on personal attributes rather than pay more attention on the academic knowledge like teacher did. The feedback from people I don't know could be a bit honest, but I still would not trust them. I would like to listen to the teacher's feedback rather than peers.

- ***Plagiarism***

Prior belief about plagiarism that might have influenced students' engagement in group and SIA was noted by one of the informants. Student BM117 was the only one who mentioned plagiarism.

BM117: It is really difficult to find out who is pulling their weight, and who isn't, because of the plagiarism thing----the final portfolio with everybody's individual works. People won't want share too much, and then you think "well, I actually don't know what you've done, cause you are afraid of sharing with me". I can't proof, and I can't measure it.

Personal circumstances

Other personal situations were also reported to sometimes distract students from study and SIA in group work. These reasons might be from their part-time work or some might be from family pressure, such as BM176 who was a mother of three children:

'I feel my life is not calm like others. My life is so up and down, so busy, work, uni, pick up the kids, and get them ready, by the time when you got to bed, you are already tired. Then you've got dedicate two or three hours into your reading.' (BM176)

BM166: Sometimes I had to rush to go after the class because I had to travel back for my job after class, so I could not stay longer for the meeting. It is difficult to keep both study and job, especially with those extra meetings.'

Some reasons could even relate to the locations in which students resided. Astin (1993) also found that the place of residence had significant effects on students' interaction and involvement with the environment of the university. In his study, compared with commuter students, he found that students who were living in the campus dormitory were more likely to be involved in university life and gain the associated social and academic skills. As a commuter, student BM166 who lived about 35 miles away from the university campus commented on her own experiences:

BM166: The problem was that I do not live here, and I travel up and down. It takes me over an hour to get here every day. So, for me to come here for lots and lots of meetings like three hours a week, and I cannot do that because of my job as well. I think that was the main problem, and people thought that I wasn't pulling my weight while I thought I could work more from home and meet less often…

7.3. The Process of SIA in Module B

Students' engagement with SIA in this module is centred on the group work more specifically and looks at students' engagment with the peer- and self-assessment in the group work situation, as group work is the distinctive feature of this module. Before this, students' general perceptions of group work are first described. In addition, students' engagement with support during the process of SIA expereinces is also explored.

7.3.1. Students' Engagement in SIA

Students' general perceptions of group work

As in other modules, group work was one of the main features in this module, and like all the other modules some people hated group work, and some liked it. However, in this module, most students (6 out of 7) said they had good experiences in group work:

> *The good thing is that you do it as a group. Especially, for the presentation, you do it together, and at the end, you became friends. We used to meet and research together, and we became friends afterwards. (BM176)*

The majority of informants concluded several factors that promoted the good group work outcomes in this module. Firstly, the group of four people was thought to be a reasonable group size by most of the informants. Secondly, some informants acknowledged that the meeting minutes made them work more closely and responsibly. In this module, students were required to record every group meeting, and meeting minutes were required to be handed in together with their module work. In this way, students could be encouraged to work as a group rather than individually. Many students in the interview mentioned their experiences of isolated working in group work task in some other modules, and for most of them the meeting minutes in this module really did make a difference, as BM117 said:

> *'Because for this module, we work together, and we did minutes for every meeting, so we could record it. That was excellent, because then if anybody didn't pull his weight, we can see, not like all other modules, people just email each other or send text messages.' (BM117)*

Fourthly, students found it easier to work with one other because they had been put in a group with people from the same programme. As this module was compulsory for all third year business school students, students were from different specific programmes. Also, because they were in their third year, students from the same programme probably knew each other already, so good friendship was also identified as one of the contributors to a good group work experience. As student BM167 emphasised, the fact that the group members were her friends and people she knew motivated her to engage in group work:

> *'Probably the people around me in our group (motivated me to work harder). I feel responsible to pull my weight to kind of provide my contribution equally, and I don't want people to think that I was just sitting back not contributing anything there. Sometimes, in a group meeting, people were saying "let's get this work done by what date", which motivated me to do the actual work…because we are friends, and I don't want to let my friends down…'(BM167).*

Some other students also found that good relations in a group could help to produce a good group work atmosphere, like BM255 said:

> *'No, it was not hard at all, because we are all good friends, and quite familiar with each other, so we worked quite well. Probably the group work was my most enjoyable experience in this module.' (BM255)*

Conversely, the only student who did not have a good group work experience in this module also attributed this to the fact that group relationships were important to the group work:

> *'For example our group split out before the presentation, and ended up doing two presentations separately, because we couldn't agree with each other…at last, we just could not work with each other… I mean it was a shame to end up with two separate presentations, but we did not have another better choice.' (BM166)*

On the other hand, working with friends might be slightly different from working with people with whom students maintained healthy working relations. As one of the students, BM167, mentioned before, she always found it hard to criticize her friends. She found that friendship might sometimes be a barrier to effective group work.

> *BM167: I was working with my **close friends**, and we all know each other quite well, so it was kind of **harder to get things sorted**. It was kind of wasting time sometimes. We always sat and chatted when we were meeting,*

but with people you don't know it may have been easier. Also if there were problems within the group, it would be easier to solve problems with people you don't know, as ***you don't want to offend your friends****.*

A few of the other students also confirmed this problem, and the most frequently mentioned scenario was giving friends an easy ride. For example, BM168 said claimed that this was often the case in their meetings. This problem was also found when students were assessing their friends, which is further analysed in the following section on peer assessment.

BM256: Some times with group work, in this case, I feel sometimes some people within group can get an easy path, like they didn't really contribute maybe as much as other group members, but they still get the same mark.

BM167: Some times with group work, in this case, I feel that sometimes some people within the group can get an easy path, like they didn't really contribute maybe as much as other group members, but they still get the same mark.

BM168: That was the main thing, kind of. You had to post the minutes on the internet for every meeting, and you had to have at least six minutes. Our group just decided to have six meetings, once every week for six weeks. We've been given a company to research, so we all ran away for whatever we'd found. A lot of them were kind of the same stuff though, then we had to decide who is doing the finance part, who's doing the strategy part, and so on.

Engagement in peer assessment

As mentioned before, social relationships were identified as being important factors in peer assessment, especially in peer assessment in the group work situation. There are two kind of peer assessment in the group work situation. One is peer assessment within the group in which students assess their own group members, and the other kind is the peer assessment between groups where one group collectively assesses another group's work. However, there are usually two means of peer assessement. One way is to give qualitative written feedback (or oral comments), and another way is to give a numeric mark. This module adopted two ways but in different situations. Numeric marks were used in the peer assessment within a group to peer assess group members' contributions. Qualitative feedback, meanwhile, was used in the peer assessment for the groups' presentations.

- ***Peer assessment within a group***

Most of the students found that it was hard to judge someone's contribution to the group work, mainly because they found it hard to put their group members into difficult situations because of the close relationships within the group. In the interview, compared with three mature students who had previous work experience, all of the other four younger informants indicated that they had more difficulties in this situation. Therefore, four of them did not give their true opinion in the peer evaluation form within their group. For example, like what BM167 and BM168 state:

> *'It was difficult to mark your friends, and we still give everyone 100%, because we were friends. So, this form didn't work effectively.' (BM167)*

> *'It was fine. I felt it was ok with me. Obviously you work with your friends and you would not mark them down, so you just gave them 100% in your team. So I wonder how much people would take it seriously.' (BM168)*

Student BM168 explained that he would be honest and happy to do so if in another situation where the assessee was not his friend or the person he knew:

> *'Too much weight on people's shoulders. I mean you've been friends for three years, and you don't want to let them down, and I mean it is hard to make such a decision, you know, you will think a lot, like people would ask you why you are giving such low marks. I don't mind marking someone who I never know or those I will meet again. Because I would be honest in that way, also I would be happy with the mark given by someone who doesn't know me.' (BM168)*

- ***Peer feedback giving on each other groups' presentations***

However, the same group of informants found it easier to give peer feedback outside of their group, for example to evaluate other groups' performances in presentations. Six of the seven informants admitted that they did a better job in giving feedback to other groups' presentations, and liked this way better. For example, the same student BM168 who said he just could not mark his group members down, and did not take peer evaluation within his group so seriously, said that in this situation:

> *'Yes, I think I took this more seriously, as you know the mark would not have any effect on their final mark. So you just kind of say what you really think about their performance.' (BM168)*

The majority of all other informants described their judgment of other groups' presentations as "like a teacher", and referred to the criteria that had been given, like what student BM166 did:

> *'Almost like a teacher, and I felt I was like a teacher. I noted down how they organised their presentation, and how they paced while they were talking, and what they did well or not well, how it could be improved according to my view. For example, some groups were reading off from their scripts, and I suggested that they'd be better talking with people rather than reading off notes.' (BM166)*

The reason why students found it more comfortable to give each other their true opinions in this situation was probably because the relations between groups were not as close as members working within one group, so students felt more relaxed. Other than this, more importantly, was that students appreciated the formative nature of this peer evaluation more than just giving a percentage mark to each other. For most of them, like BM166, they recognised the benefits to themselves as well:

> *Also I think giving others feedback is also good for myself as well, as if you don't give feedback to others, you'll never know what things you could do wrong. You see yourself in others. You also can know what other people's ideas are and can compare them with yours. (BM166)*

- ***Engagement with peer feedback***

Upon being asked about what they thought about the feedback that peers had given to them, unfortunately, in this module, both peer-evaluation forms withheld from the assessees. This was identified as a weakness by students, as most students were keen to see what others had said about their performance. Not seeing peers' feedback led some students to identify this assessment as a gap in this module, as BM255 and BM166 mentioned:

> *'We had feedback on each other's presentations, however I don't know what they'd said about my presentation because you don't get that feedback back to us. We submitted to other groups in the portfolio which only the teacher can see it, not other students.' (BM_255)*

> *'I think it is good to give each other feedback, and also I think there should be a chance to let the students discuss the feedback received. Also, we may have some suggestions or choices on the tasks, or an opportunity to discuss it with the tutor.' (BM166)*

By contrast, some students still disregarded peer feedback because they never had seen it, like BM167, and did not know whether it was good or not.

> *No, I did not think about this. I wouldn't want to, as it could be so scary to see what other people said… (BM167)*

> *Maybe it would be good to have a look at what other people say about your work. But I am not sure it will help a lot. I do not think it would, because I've already got my tutor's comments, which I took on board. I know that tutor's feedback would help me. (BM167)*

People who disregarded peer-feedback or who felt scared to see it might have changed their views if they had had a chance to see it. BM168, for example, had a chance to see his peer feedback because he requested it, and found it very useful:

> *'(The feedback I got from peers was) good. I think it's better than the tutor's cause they said what they meant, like what they liked and what they could not understand. It was a lot easier to understand than the tutor's comments. When I got the tutor's comments, I was always struggling to understand what they meant. (BM168)*

Engagement in self-reflection

Most of the students interviewed said they did this self-reflection as honestly as they could, including student BM176 who could not see the relevance of it. For most of the informants, self-reflection was a new experience, but 5 out of 7 found this experience was helpful and interesting. BM166, for example, said:

> *'We've done reports and writing in other modules, but this was the first time we were asked to look back what you did, and to reflect how we found. I think obviously we had various issues in the essay writing, but we did not have a chance to think what could have been done better. I think the self reflection gave you a chance to assess yourself and how would you do things differently. I think it's really good.' (BM166)*

However, a few informants were not sure about the relevance of this particular module, as BM 176 described:

> *'It was helpful. I just, I don't know whether it is relevant to this module. Maybe it helps the tutor to know how students conceive it, and how they looked at it. I just felt that it was not relevant at all. We have done the presentation, and they have given us their feedback. And obviously I can understand how this is helpful for them from their point of view. But I don't see how related it is. I just wrote it because I was required to do so at that time, and I just wanted to do that to pass my module. I did it also because it was required in the portfolio, but if I had a choice, I would not do it. (BM176)*

7.3.2. Support for Student Involvement in Assessment

Support from the Teacher

One of the strengths of this module identified by informants was the teacher's feedback to students on their work. All seven informants agreed that the feedback they received from this module was better than any other modules they had previously taken.

> *BM166: Generally they gave pretty good feedback in this module. For me, the feedback I got from this module was the best feedback I've had.*
>
> *BM 167: To be honest, for any other modules, we don't usually get such detailed feedback as this one. If you don't have feedback like this, you wouldn't know where to improve next time.*

Firstly, the feedback was thought to be very detailed and specific, as expressed by student BM166:

> *'Because they sent out a form with detailed feedback for each section rather than general feedback. They also gave us detailed feedback for each part of the portfolio and gave us suggestions about what could be done to improve or to be better. I know it may cost a lot of time for tutors, but once they did, it would be really helpful for us. I think the more feedback you give to someone, the better they can improve. I remembered that the teacher gave us feedback on the warming up presentation as well. It was like a practice before the final marked presentation.' (BM166)*

Secondly, the clear assessment criteria that had been given to students enhanced the quality of feedback, as students could check with the criteria to make full use of the feedback.

> *BM167: The feedback was very positive, and it was really detailed. It was like an A4 sheet, and everything was broken down into sections according to the requirement listed in the handbook about the portfolio. That actually was very good, as you can see where you've gone wrong and why. We got another A4 page of comments on our presentation, and you get a mark from each element that the teacher was looking for, like speaking, content and so on.*

Thirdly, the feedback was also thought to be useful enough because it pointed out both strengths and weakness with suggestions for later improvement. The strengths that were highlighted by the teacher were found by students to be encouraging.

> *BM177: That was great, and it told us where was excellent, and where could be improved. It gave me great confidence towards the final portfolio. The*

feedback for the final portfolio was excellent from the teacher. It was very specific, and I even wrote an email to the lecturer to say thanks because you know you really don't get such detailed feedback very much. I find it's very helpful and I love feedback especially the critical one, as they are most useful to me.

Other than that, students also had the opportunity to get tutor and peer feedback during the module in tutorial discussions like student BM166 said:

'I remembered that the teacher gave us feedback on the warming up presentation as well. It was like a practice before the final marked presentation.' (BM166)

Several students mentioned this opportunity. However, different student groups got different tutorial tutors, therefore the help and support received by students varied a lot. Inevitably, no feedback is perfect; one student mentioned that the turnaround time could be quicker to feed forward into their next piece of work.

BM176: It would be more helpful for our portfolio if we could get it a bit earlier. The day we got [the feedback for the presentation] was just a day before we submitted our portfolio.

Students' engagement with support

- ***Engagement with the teacher's feedback***

Unlike the attitudes towards peer feedback, without any exception, all seven informants engaged with the teacher's thorough feedback. They read the feedback carefully, referring to the handbook assessment criteria and guidance, and most importantly they took on board what the feedback suggested.

'I took the module handbook with me when I was reading the feedback, and the main thing was the conclusion needs a bit work to do, and I think that was something I picked up a lot of.' (BM166)

'I read them, and I took the comments from our presentation on board in my report writing. It helped me to do the report better. For example, in our presentation, the financial part was commented "not specific enough", so I changed this part in my report into a more detailed financial report. It's good to see my own strengths and weaknesses. It's quite good to have these pointed out.' (BM167)

Compared to students' engagement with their peers' feedback which was described earlier, students' response to the teacher's feedback was much more positive and active. Students' deep appreciation towards their teacher's feedback was largely due to the high quality of the feedback that the teacher offered to them.

- ***Seeking help***

Three mature students who had worked before mentioned the availability of academic learning support in the university, and those three students actively sought these supports to their learning.

> *'There's effective learning services which was excellent. Usually, what I do, if you looked at my email, every stage I have gone through, I send them to the people from the organization called Effective Learning. And they told me where I need to change and develop. Like there's a guy called C, and he helped with my writing, and he highlighted the area that I needed to change and told me about the areas where I am weak, and gave his suggestions. I even did not know about them, just once my friend, she told me. She did really well last semester, and she told me that: you know what helped me really is the people there advised me on my writing. They looked through it, and they'll tell you whether it is good enough or not, and the area that you need to change.' (BM176)*

Most of the informants, especially the younger students, usually sought help from their peers. Four informants reported that they had sought help from their peers, and that this approach was efficient.

> *'You would find that you do not get so much support from other fellows, maybe just because you never asked. I do not know. When we were doing the presentation, we had to collection information, and I did not have some source, then I went to ask some other students, and they helped me. Maybe sometime, people just never ask for help.' (BM_256)*

7.4. Products of SIA for Longer Term Learning

7.4.1. Attitudes towards SIA

One of the important products of students' experiences in SIA was their attitudes towards such types of assessment. Interviewed students from this module did not directely talk about the changes in their attitudes towards this kind of assessment, but from what they said about peer assessment and what they described about their

experiences, it was not hard to see their gains from this module. For example, student BM168, who was not so supportive of peer assessment, described his experiences in this module as follows:

> *'I found the most interesting thing was listening to other groups' presentations, cause the presentation started half through the semesters, and our group was at the end, so it kind of gave us an idea of what we should do or not.' (BM168)*

Many other informants gave similar statements, and only one student (BM167) was still extremely resistant to peer assessment. As presented in the section on students' engagement in self-reflection, the majority of students had their first positive experience in self-reflection within this module. Some of them expressed a wish to use this skill again in order to monitor their future studies.

7.4.2. Assessment skills

Talking about how they were doing the peer feedback, most informants described how much they learned about the skills in giving feedback, and also in judging the quality of a piece of work. For example, student BM166 learned:

> *'Trying not to be too critical at the same time and trying to make sure you are looking for both good and bad things. Trying to listen to their whole presentation even if it may not be so interesting or they said something you did agree with or did not like. In general, it was fine with me to give comments or mark others, and I liked it. It made me feel that I was a teacher...' (BM166)*

Most of the informants also learned how to judge themselves from doing the self-reflection. Some learned to be responsible and reflexive to their own studies, such as BM176:

> *'It shows responsibility as well. They will have an idea of what they think as well, and how they valued the work as well as that of others. Sometimes people will swap their feedback. The same way when the teachers look at it and the same way when the students look at it. Because you will find after this level, whether you decide to go for the 4th year, when you go out in the field, what you carry from here is good to help you in the field itself. So how you look at things, how you perceive things, if you perceive things well, then you will do well.' (BM176)*

7.4.3. Other transferable skills for longer-term learning

Research skills and independent study skills were some of the most important skills that students appreciated. Almost every informant mentioned these distinctive gains from this module.

> *I would say the research skills that I got from the research work. This is the first research into a real company we've ever done, and I found it was so useful. Again, of course the strategy of a company's development, and some other skills like presentation skills… (BM168)*

> *I think this module needs more independent study skills, and maturity. You need to make sure you can study by your own rather than being told everything. As it needs you to research a company, so you need a lot of research skills as well. I like the independent learning…(BM166)*

Other career-related transferable skills like team working skills, communication skills and time mangement were also perceived to be useful gains that students got from this module.

7.5. Conclusion

To conclude, students perceived the main strengths of this module to be the clarity of assessment requirements and feedback from the teachers. In the SIA process, the clarity of assessment requirements motivated students to get involved in peer feedback giving; and the rich feedback from teachers on students' work helped students to be actively engaged with the feedback they got from students. However, the side effects of marking upon students' social relations were found to be barriers to students' full engagement in SIA.

CHAPTER 8 QUALITATIVE ANALYSIS II: IN-DEPTH ANALYSIS OF MODULE C

8.1. Overview of Module C

8.1.1. Module Aims and Rationale

This final year Honour's module was an integral part of the Management Science Honour's programme and adopted an innovative approach to develop personal skills and reflection upon the learning experience. The aim of this module was to use students' knowledge on management that had been acquired in other modules from the management programme, to develop additional broad-based skills thought to be essential for the effective practice of management science by drawing on the students' project experiences, and through other appropriate activities.

The module emphasised the role of reflection, as the module leader believed that "the effective practitioner is a reflective practitioner". As mentioned above, the primary objective of the module was to develop the students' skills in management practice, which it sought to do through a model that encouraged reflection for action, in action and on action (Cowan 1998). However, it is difficult to teach those skills effectively through conventional classroom methods unless they are experienced or at least simulated (Belton, Gould, and Scott, 2006). Therefore, students in this module were given considerable autonomy in devising learning content, project activities and assessment. The design process was seen to be a significant element of student involvement in assessment of this module and associated learning.

8.1.2. Teaching, Learning and Assessment Methods

There was a strong focus on independent learning throughout this module. There were no conventional formal lectures, nor was specific subject content taught or defined. The class was made up of different forms of meetings, discussions, and

action research. The module leader only assigned three of the activities to be done for this module.

The class began with a reflective exercise on effective and flawed learning experiences. Students were invited to ponder their previous learning experiences and identify key criteria for assessing the learning. By doing this, the teacher introduced how this module would be organised, and why. After the first meeting, students were asked to read and discuss the reflections chapters from the previous year's honour's student's dissertations. Each group had to present 'what makes a useful reflection chapter in your honors project?' in the second class meeting. This formed 10% of the overall mark for this module. The second activity was to sign a 'learning contract', after students had chosen their group members and group projects. In this contract, students had to decide on their learning objectives and assessment methods, which were to be agreed with the module leader. It is worth noting that peer evaluation within the group was a compulsory part of assessment which all students enrolled in the programme had to do online. Once the learning contract was set up, students began with their own project which was their third activity in the module. This activity made up the remaining 90% of the mark for this module. During the process, meetings with the teacher could be called when students felt it was necessary. There was a class meeting at the end of the year to discuss students' experiences, and obtain comments about the module. This unit ran for the full academic year, and those three activities started from the first semester.

8.1.3. Module participants

This module was optional for all final year Business and Management Honour's degree students. It was offered to both single honour's students and joint honour's students. It was worth five credits for single honour's degree students, and ten credits for joint honour's degree students. Single honour's degree students had to participate in two project activities in both semesters, but the joint honour's students only needed to participate in one main project, from either the 1st semester or the 2nd semester.

Module C was a small class with fewer students compared to the other two modules. There were normally between 20 and 30 students and two academic staff registered for this unit for one academic year. The data for this research was collected at the end of the second semester for the academic year 2008-2009, when there were 29 students in total. I visited the class during their last discussion meeting after the students had completed their projects and activities. Of the 19 students there, only three of them agreed to participate in the interview. They were all single honour's degree students who only did one project for activity three. One of the three was an international student. This chapter presents the main findings based on the three participants' interviews.

8.2. Presage Conditions for SIA in Module B

8.2.1. External Conditions

Course Content

- ***Relevance to career interests***

When students were talking about a course or a module in general, 'relevance' seemed to be an important indicator for them to judge their overall satisfaction with the course or module content. The first indicator was the relevance to their expected career route. Students valued the subject content they believed would be useful to them in their probable future jobs. Therefore, even within the same module, students could have totally different attitudes towards the content because of their different career interests. In this module, the specific learning content was down to the students, and they could choose what they wanted to learn. Therefore, with this flexibility, students could have higher satisfaction with the content because they could choose something relating to their career interests or personal interests for the most part. Two of them clearly expressed their appreciation of this flexibility and their choice of learning content clearly showed their career orientation.

> *BM243: It is really related to what you've learned before, and you just never do it. Also I think it will help me later, as I definitely will do something with the consultancy. So I've got to deal with the client, like you have to plan, and check with the records, and being able to create or look up the database, this sort of thing.*

However, the course content might not be able to accommodate every one's career interests, as most of the time it was a group decision. Someone like student BM240 did not find the module relevant to her career interests.

> *BM240: I don't find this module that useful…it might be more helpful for pure management degree students, but for me, as I am kind of mixed of management and finance, so I can choose anything related to finance or management or together. I decided a topic which was more related to finance, better.*

- ***Linkage with other modules***

Other than this, it was noticed that students were also concerned about the content linkages to other modules or to what they had learned and received in the programme. For example, when student BM240 said she did not find the module useful to her, she listed several reasons, one of which was the lack of linkages of this module compared to other modules. She said*: "As this was not very related to other stuff we were doing".*

Module Organization

Module organization refers to how the module was organised in terms of logistics and time arrangement. The most two important themes that students identified in this unit were the expectations and requirements to be achieved within the time frame .

- ***Clarity of objectives and assessment requirements***

None of the students interviewed were sure about the requirements of this module. The lack of communication and obscureness of course objectives and requirements was found to be one of the key conditions that seemed to discourage the students interviewed from their involvement in assessment in this module. When asked if they had any clear idea on what standard of their work would get an A or B, they answered:

BM240: Not really. I just followed my thoughts on what would be the best, and tried my best to do all the things that I could think of. Sometimes, teacher described us or gave us the criteria, but they were quite abstract and I did not know how to use these criteria for judging myself. I think it would be good if we could have an exemplar before we did the project, like what we were doing for our dissertation, as we could borrow the dissertation from previous students. After seeing their work, I had a clear idea what structure the dissertation would be and what standard our dissertation was supposed to be.

BM241: I don't know. I think it would be difficult to the teachers as well, because how you would compare a database to a concert event together. For the report, I mean obviously I've written plenty of reports for management science in the past, and so I know what structure they are expecting, and what data they are expecting, and I know the length they are expecting. We went for 3,000 words as we thought that would be quite appropriate for this task, cause that was what we'd done for the similar task in the past.

BM243: Understanding how to do well in the module was more complicating, because you don't really know what they are looking for…You are thinking maybe they are looking for more information on this aspect, so should I spend more on that part or not… They even don't say how they are marking it. You have to ask them, like would you like our project doing in this way or that way. Then they replies yes, or whatever. It's like to communicate with client what they want in the product.

From the extracts above, it was very clear that the three interviewed students were not sure what they were expected to do in their self-designed project and assessment. This lack of clarity and information was also found in how the students thought this module differed from others, resulting in the students' low engagement in later activities. For example, in peer assessment within the group, all three students did not take it seriously, but only rated their peer's effort rather than the quality of their work.

One of the three students interviewed seemed to have few clues about the purpose of this module , and did not seem to be aware of the distinctive aims. For example, student 240 did not notice what made this module different from the others. For the other two students, the only difference was there were no exams.

- ***Time issue and workload***

The other concern the three interviewed students commonly found was that time was an issue for them to fully engage with the module. All of them complained about the busy schedule of final year, the high work load of the other courses and the large amount of time in group work and decision-making in this unit. Therefore, the question 'which year would be more appropriate to carry out this module with such a high SIA like this, may need to be considered by the module leader.

> *BM240: We were busy for other modules at that moment, so just got it done as quickly as possible. We were not paying too much attention on this module… and I had other exams at that moment.*
>
> *BM243: In our team, we did not have that much time for group meetings, because in the final semester we had a lot to do.*

One of them raised another issue about the inappropriate timing of this module in relation to assessment and the credit system at the university. The marks in final year mattered to those graduates therefore, the mark could be one of the side-effects of their involvement in assessment in the module.

> *BM243: Because at honour's year, a lot of people don't want to be marked down, so they won't mark anyone up because they feel that by marking someone up they are marking themselves down….a lot of people are playing the game of the marking system.*
>
> *BM240: I think this year, we've got masses to do, so it would be good if it could be done a little earlier like in the 3rd year. Also the group size is a bit large, like ten people is impossible to manage, and the tasks is the same so each of us just did a tiny little bit, so you don't learn as much as you expected. And the peer reviewing, definitely needs to be changed. It could be done in any other years but not the honour's year. Maybe it should be explained more rather than changed…*

The Nature and Extent of SIA in this module

Self-designing the assessment task was the main feature which made this module different from others. As already noted, the students signed a learning contract where they set up their own learning objectives, work-plan and methods of assessment. Students were not involved in criteria generating or marking in this module. To most of the students, it was the first time to be involved in the decision-making at this

level. One of the interviewed students, BM241 indicated the scarcity of this kind of involvement and expressed his welcoming of it:

> *"From the whole university classes, yes, as we don't usually get such opportunity to decide ourselves, so it is important to have this one like this. It is nice to be able to make decision just once, and it would be too much if all the class is the same like this one." (BM241)*

In the interview, students also talked about their feelings and views towards their involvement in the decision-making at the beginning of this module. When the students were asked about this self-designed assessment, all of them admitted it was a new experience and reported their feelings of uncertainty to some extent. They used words like 'strange', 'difficult', 'hard', 'confused', 'not sure' or 'getting lost' to describe how they felt when they first heard about what was going to happen in this module.

> *BM243: Found it **new** and **strange**… It was quite **difficult** to come up when I was dealing first place of what you wanted to learn…I think we were just about **confused** what we are supposed to do…* like **wonder** what we can do now… *the decision is **hard**…*

> *BM241: In some ways it was easier, as we had control. But, in some ways … I felt a bit **lost**…but it's easier and **hard** at the same time… At every stage, we have people who were **not sure** which project they would like to do because we had choices.*

Although students were involved in designing the content and methods of assessment, except for giving a mark (out of five) to each group member, students in this module were not involved in marking activities. It was expected that students would give each other feedback on the presentation and the group project activity within groups and between groups.

Other presage factors: social relations and atmosphere of a class

There were also communication issues for some students. For example, the international student from Asia mentioned the relationship with her fellow students was not close. She thought the lack of communication and social interaction might have affected her participation in the group work.

IR: What do you think is the reason for you to feel difficult to communicate with local students? Do you have any contact with local students after class? Do you hang out with them?
IE: I think lacking of socializing with them was one of the reasons. I spend most of my time with my Chinese colleagues, and rarely hang out with foreign (local) students after class. (BM240)

This was also confirmed by one of the local students in this group who mentioned that there was lack of interaction between fellow students in the class in this module. She said she knew some people and what kind of topic they were doing, but she thought this kind of relationship or interaction "*was not really interacting academically"*. From what students said about their interaction with fellow peers, it seemed that there was very limited opportunity provided for them to discuss formally or have situations facilitated by the teacher.

IR: Did you have a chance to interact with other groups?
IE: Yeah, only at the beginning and the last meeting when you were there, that was the formal meeting we had to talk with outside of the group. It was interesting to hear what they've thought about the class. (BM241)

8.2.2. Personal Conditions

Students' Prior Experiences of Involvement in Assessment

Students' previous experiences in assessment were found to be a significant presage condition for their involvement in assessment. All of the interviewed students told of how their previous experiences played a role in their engagement with next learning activities.

BM240: My first experience of the group work here was not that nice. So it made me a bit resistant to such group work. Last semester, I missed one group meeting because I had to go to Edinburgh for my visa application, and my group decided to mark me down because of this. I did not know about the meeting, because they decided it suddenly in the lecture when I was not there, and nobody informed me…Some times, the foreign (local) students could be very biased on the marking to Chinese students like us.

BM243: If you were in a normal class, (say) you get taught to write your report, and you get the structure of the report, and you get the deadline date, and you get who you are suppose to work with, and you get what's supposed to be on the report…

BM 241: I mean it had to require a lot of negotiations, which we were not used to, as we were used to be told 'you do a presentation, a report and some reflections'.

Another example was, their experiences in peer marking. They had all experienced poor peer marking, and these experiences influenced the way they engaged with the involvement task, and even to some extent the way they acted in this module. For example, BM241 said he had given everyone a 3., Some of them had a view that peer assessment was really about the quality of peer's work according to what normally they had done.

BM241: We always have peer assessment through our course…, it was required by the lecturer and also in other classes we do the same. It really was just a formality. You just go the website and rate everyone including myself, in your group from 1 to 5, but in vast of majority cases you just do 3, 3, and 3, and everyone got 3. because like you have to do an average of 3, so yes, that's a safe mark to give.

BM243: Obviously, there were some other projects in the same year in other modules, the same thing happened. For example, the project I did last semester, the two boys marked our two girls down, but the girls marked them at 3. So the boys got 65, but the girls got 60 only. Clearly there's some game playing going on.

Proper guidance and practice with the assessment design and requirements at the beginning of the unit would be beneficial for students. Not only does their prior experience of involvement in assessment matter, but also the previous work experiences. Student BM243 commented about what she learned from her part-time job.

BM243: I used to manage people in a team anyway, so after we ended up with ten people, that was ok… because that was what I did in my part-time job, like look after the till, look after the cashier staff. Sometimes I probably developed my skills at the Uni as well, as I usually take the team manager, and I just do all the time. So, probably, that helps me a lot, like the use of the Google timetable, I used it before in my other group, and they said that was a good idea.

Beliefs about assessment and understanding of SIA

During the interviews, students talked about their understanding of student-involvement. Even though respondents told me they had some poor experiences of it,

students were still able to see the point of their involvement and were trying to make sense of what it should be for. Student BM240 had a very constructive understanding of self-assessment on self reflection, so did student BM241 who finally did see the point of peer marking.

> BM240: *I guess we had self assessment. I think self reflection which we were writing was kind of self assessment. In fact, the self reflection was all about how would you evaluate your own work and your own study, such as what you could improve next time, what was your strength this time. But we did not give mark to our own work.*
>
> *BM241: In terms of the way we got to choose to mark the work, I think it was nice to be able to take a sort of teacher's point of view to see what they are looking for, a sort of analyse how really would you work out a project. 'Cos I mean, I guess as a consultant job, you'd have to do that for yourself.*

Students were not only able to see the point of different kinds of student involvement in assessment, but also believed in its value, and believed they were able to do it well if everything turned out right.

> *IR: Let's say you were invited to mark a piece of work from someone who you didn't know, would you be able to judge the quality of the work?*
> *IE: I think I would. I think, having gone through so many work and reports and received so much feedback myself, I think I would be able to do so like a teacher. (BM241)*
>
> *I still think it's a good thing to do, but people really need to understand it more. (BM243)*

Some other personal presage conditions may come from the individual, such as personal character or confidence. For example, student BM240 had a problem asking questions, which distracted her from actively seeking advice from teachers.

> *BM240: The teacher was always there for you. However, sometimes I felt not confident to ask them by hesitating if my question was stupid. So sometimes just turn to my friends for help. If others also had no idea and found it was a tough question, then we might go to ask the teacher together. It was more important to listen to the teacher's idea.*

8.3. Process of Student-Involvement in Assessment

8.3.1. Students' Engagement in Involvement

Engagement with designing the assessment

Before students designed their own assessment, they had to design their project and learning objectives. Interestingly students seemed to be passionate about their interests and engaged in the project design actively.

> *BM243: Our group learning objective was to learn more about Microsoft Access, because we'd never worked with it before. We also wanted to learn more about working in a team as well, so we'd wanted to learn what net interests we had, what approach to take, because that would help what we would do in our careers, and the consultant wants to know what's out there… whole purpose was to learn something new, so we think it was worth it.' (BM243)*

However, compared with designing their project activities with intrinsic interests and the intention of seeking something different, students seemed to use the strategic approach in designing their assessment tasks. They deferred to assessment styles they had experienced in other modules, and chose the familiar rather than consider what assessment methods would be the best to reflect their learning and why. For example, student BM243 clearly indicated the reason for them to choose the group report as one of the assessment tasks was because they had done many.

> *BM243: For Group report, which we've done a lot, so everybody was kind of comfortable with that and know how to do it.*

Besides the familiarity, another principle of students' self-designed assessment was the degree of difficulty of the assessment task, like student BM243 said:

> *"Cause you are writing your own (assessment), so you obviously going to make them quite easy 'cos you want to get good marks. So you managed to do that, but then you feel like it supposed to be the same like other honour's year modules. And all any other honour's year module you will learn so so much… Yeah, for us, we've learned how to use the package, but it didn't feel as much work as any of other modules… I don't think I've learned too much like other honour's year modules…" (BM243)*

Engagement with assessing peers

Peer assessment was not designed by students, but was the compulsory component throughout the programme., Students from this module perceived this peer assessing as evaluating peers' effort rather than the quality of their work as did the participants in the other two units.

> *BM241: I guess just about the effort. As you never rate your peers down if they attended every meeting and handed in their sections. I just give everybody 3, yes, I do… If there was anybody who worked harder or more, or someone who worked less or nothing, I would rate them higher or less.*

As this peer assessment affected to some degree people's final grade, and because it was attached to the marks, students seemed to care more about the marks than the process of assessing itself.

> *BM240: Feels a bit pointless, as some times people talked over with each other on what mark they would give each other… I don't think people would point out your weakness directly, as it would not nice to each other. Everybody cares about his or her face and friendship.*
>
> *BM241: I don't really think about it anymore. I mean I guess when I firstly did it when I was in 2nd year, and I guess by then it was a bit scared. As we knew you could affect someone else's mark just by being mean to them, by pressing that button. But now, I just got to used to it, and we got to do it ten times a year.*
>
> *BM243: Because in honour's year, a lot of people don't want to be marked down, so they won't mark anyone up because they feel like by marking someone up they are marking themselves down….a lot of people are playing the game of marking system.*

Engagement with decision-making about the group work

Group work was the main form through which students' project activity was accomplished. It seemed that students in this module were quite used to group work at this level, as they had experienced in previous years. However, the group work in this module differed significantly. The most distinctive features were that students were involved in the decision making of group work design and group forming, which included project choice, assessment choices which were mentioned earlier, their own role in the group, and the group size and members. Therefore students'

engagement with the group activity was an important lens to explore their experiences of SIA in this module.

However, group work is always a complex context where many factors might be included, and this section mainly focuses on how students in this module were engaged in their interaction within the group and the decision-making as a group. BM241 was the team manager of her group. From this extract below, it can be seen that the student was actively involved in managing the group in this activity, and took the opportunity to develop her management skills.

> *BM243: I did not choose to be team manager…, and at the 1st class of this module we talked about the things we are going to do and made up a check list, but the people who wrote the list lost it. Then I started to try to make another list and started to contact people. Maybe I was the first one to email people, then they thought I was kind of in charge of everything. So from then, I was kind of making sure everything was going well. Four weeks in, we did not do anything, then I organised a meeting with the lecturer to discuss our project. After that I set up a google timetable for people to get access and check the timetable and things listed to be done, so everybody could go and check and also edit it.*

Student BM243 was in the same group with BM241, and he had very positive experiences of group work, and actively interacted with his group members. He said:

> *"We all design it, and did it, but I just did the writing part of designing…I think everyone in my group was enjoying it… I knew at the beginning, there were a lot of difficulties about uncertainty aspect… at every stage, we have people who were not sure which project they would like to do because we had choices. And of course there was choice about what was on, and we had to talk about that with each other, like there's kind of negotiation." (BM241)*

Unlike the other two students, the extract below suggested that BM240 had not been as actively involved as had been expected by the teacher:

> *"Actually one from our group was extraordinary capable, so s/he wrote the learning contract, and the rest of us just had a look and thought it was good."(BM240)*

This was also apparent in her low engagement with the feedback and her interaction with her peers. She did not seem to respond to the feedback she was given. She also seemed to be reluctant to interact with her group members, as she did not know much about them apart from her own sub-group's work.

> *"I did not read my feedback very carefully if I am honest with you." (BM240)*

> *"I don't know how others did their job, but I can tell you about how we did in our finance and marketing group… not sure (about other students' views in this module)…" (BM240)*

The choice of group size was totally up to the students'. In this module, students ended up in much larger groups than students had experienced in other modules. For example, in each semester, there were at least ten people in one activity. This unwieldy size might be one of the reasons that students found it hard to manage themselves at the beginning, especially when everyone had different opinions on project choices. One of them said:

> *"It was quite difficult to work out who exactly were in the group…it was confusing who was doing this task and who was doing that task, so many different tasks. So the first few weeks we were like to figure it out who exactly was doing what…" (BM241)*

However, facing the problem of group size and with the autonomy of choosing groups and activities, there were two kinds of strategies that students used when problems arose. One of them was to form another group when some of the group members found that the initial plan was not what they wanted, as BM243 observed:

> *"Initially, we started off like that (with 20 people), but later we slipped into two teams of ten. Ten of them went to do a database which was our team, and another ten went to do a website … We all decide ourselves. It's good that we have this kind of choice, as you may find it's interesting for you at first, but it might not be useful for you in fact." (BM243)*

Another strategy was to break into sub-groups to allocate people specific tasks. Student BM240 described what her group did:

> *"After we decided to do this, we grouped into smaller groups, such as marketing group, finance group, planning group, you know something like this, and each group was responsible for certain kind of things." (BM240)*

In the second example, there was a risk of provoking the 'diligent isolation' in which individuals or sub-groups work in isolation without any interaction or collaboration. Pieterse and Thompson (2010) discussed the presence of 'diligent isolates' in their study of group work. They referred to the 'diligent isolates' who worked alone as the converse of the 'social loafer', who tended to reduce their effort in the group. This risk was found to be evident from what the respondents had described. For instance, in the second example, a group of 15 people ended up with some isolated subgroups

that failed to cooperate or engage with each other. One of them was describing their group work:

> *"It was mainly keeping in touch by emails to plan things, but not knowing who was doing what." (BM240)*

She eventually only works within her own subgroup:

> *"I don't know how other groups did their job, but I can tell you about how we did in our finance and marketing group." (BM240)*

> *"For most of the time, people just do their own part without an agreement on the content or length of each one's work. Finally, what people did was just put all the parts together without knowing or discussing each other's work..." (BM240)*

Although students apparently identified issues in front of them and came up with their own decisions and solutions to the problems of group size, it may not have been a perfect solution or even the problem that students should have been dealing with initially. Intervention from the teacher might have been more effective to solve the group size problem. At the same time, from the examples, it can also be found that group size was an important factor that influenced students' engagement of group work. If the group size was right, it could have enhanced collaborative learning. Some students found this collaboration after they decreased the group to a more manageable size:

> *"We were really supportive in a way that a lot of people were quite willing to work with some people they hadn't worked with before."(BM243)*

> *"(It) required a lot of negotiations. Well, in the end, we all agreed on what we'd discussed." (BM241)*

8.3.2. Support for Student Involvement in Assessment

The teacher's guidance and intervention is an important source of support for group work, and it is more necessary for those students who have not experienced this level of SIA. This section is mainly looking at the role of the teacher in supporting this high student involvement, , students' engagement in seeking teachers' support, and responses to the support given.

Support from the Teacher

Because of the nature of this module, which was very much self-directed learning, the teacher's role was to facilitate and support rather than lead student learning. It was understood that in this module, the teaching and learning were totally down to students themselves, therefore communication between teacher and students could only happen when students chose to talk and seek support. This model of practice was communicated with students, and students seemed to be aware of the opportunities talking to the teacher.

> *BM243: But actually, you really need to keep up with the lecturer, as they're just like your client, and you need to keep talking to them all the time.*
>
> *IR: So, what was the important thing to do well in this module?*
> *IE: I think you've got to communicate with lecturer more. It would definitely help you. (BM240)*

The role of the teacher was advisory rather than direct intervention:

> *IR: How was the help? How were the suggestions she gave?*
> *IE: Yeah, it was good. She told us that we were doing well, but also pointed out what was missing there. I mean she wasn't really telling us what to do, but suggesting that maybe we could think about something, like giving us little hints. Then when we went back to do again, we realised 'oh, my god, it's really important'. (BM243)*

From the three students' interviews, their self-directed learning experiences might tell us something about the role of the teacher's support in this particular context. Some of them overcame their problems through the teacher's support or intervention, for example, one of the groups had problems with assigning group tasks, but with the teacher's suggestions, this group did the task in a more sensible way:

> *IR: As you told me you chose what you wanted to do and in which group you wanted to be. I wonder if there was a case in which some groups might be crowded and full of people while some might just get few or even one person.*
> *IE: Yes, that was exactly the case of our group. There were only one or two people who chose to do marketing, and two people including me chose to do finance, so the lecturer suggested to us we'd better put these two groups together. (BM240)*

However, if there is a lack of guidance, learning sometimes goes slowly with little progress, as BM243 found in her experiences in this module:

> *"We did not learn that much really, because when initially we decided get someone to teach us how to use the software, but then we had to teach ourselves. It's difficult, as like if you don't understand what it means to begin with… we didn't get that much in-depth understanding of the database." (BM243)*

This is also evident from the international student's response about her group learning experiences. She had problems in working with local students in a group, as she thought they were prejudice toward her. She highlighted how a teacher's intervention could change the situation:

> *"(It) depended on the different teachers we had. Last year we had a lecturer who was very concerned about this (group problem)… So, sometimes the group work really depends on how teachers deal with it." (BM240)*

It shows how a teacher could monitor and control the group dynamics to make sure the choice and autonomy are well used. Misused, such choices and autonomy may discourage students' confidence and engagement in their involvement in assessment later.

Engagement with support

- ***Seeking help***

Although it was understood that there would be help and support only if students actively sought it themselves, not everyone took this opportunity as often as they needed. On reflection the three interviewed students, determined their meetings with the teacher were not frequent enough, and realised it was part of their responsibilities.

> *BM243: We didn't have that much conversation as we should have (with the teacher). This is probably this downside of our activity. As we really should have gone back and talked with the teacher more about what they are looking for. We only went to check with her two or three times about the design of the database, like was it enough or not, the format of the database is all right or not, and she said yes, yes, or you should go in this way. But still I think we should have discussed more than that.*

8.4. Products of SIA for Longer Term Learning

8.4.1. Attitudes towards Student-Involvement

First of all, compared with their feeling of uncertainty at the beginning of the process, some students ultimately experienced the positive side of student involvement in assessment which in their own words are: 'interesting', 'motivating', 'free' and 'good'. Some students' attitude towards the self-designed assessment also changed. It was not clear whether all of the students ended up liking it or not, but at least those three in the interview all found something valuable rather than only experiencing uncertainty.

> *'It was **interesting** and we've got a lot of **input** in this class… We also got some **saying in assessment**. Yeah, it's really very **different** from anything I've done before. (BM241)*
>
> *'In a way, I like the **freedom**, and I had the **chance** to do the things which I was interested in. You were more kind of **motivated**, cause you were more interested'.*
>
> *IR: How did you find the way of doing this class after having it?*
> *IE: I really **liked** it, yeah, I really do. There wasn't so much theories, but it was based on what we were doing. We produce something as well, for us was the database… (BM241)*
>
> ***'Good** to be able to like come up with what would you like to study yourself rather than like taking lecture notes, stuff. I liked it.' (BM243)*
>
> *'I think definitely you **realised** you are able to come up with ideas yourself, and you realise that you are allowed to make decisions.' (BM243)*

8.4.2. Assessment Skills

Although there were few marking activities, there were a lot of opportunities for students to experience other aspects of assessment, such as designing the assessment and giving the feedback to each other. Two of the interviewed students indicated their perceived advantages of such experience but no respondent talked specifically about their improvement of assessment skills as a result of their experience in this module.

8.4.3. Other Transferable Skills for the Longer Term

More commonly mentioned were transferable skills that could be useful in the workplace or other learning situations, such as time management, team management, team work skills, and communication skills.

> *IR: Do you think you learned anything from this module?*
> *IE: Not so much I guess. Although not too related to what I am doing, still got some experience in the practice, such as organizing the event, time management, and planning… could be useful to my life and work later.(BM240)*

> *I learned differently here. It's more about self-directed study rather than doing things that the teacher asked you to do. You have to plan it yourself in study. I found what I'd learned here was from what I had summed up by myself during learning, not told by the teacher. (BM240)*

> *And of course, the third thing would just be you know, the team working, and communication, you know, all the things that we normally do in a group work. It was one of my more useful classes that I am doing this year, definitely. (BM241)*

> *It does really related to what you've learned before, and you just never do it. Also I think it will help me later, as I definitely will do something with the consultancy. So I've got to deal with the client, like you have to plan, and check with the records, and being able to create or look up the database this sort of things.(BM243)*

8.5. Conclusion

By looking at the module in detail, students' learning journeys were presented in a more contextualized way in which the assessment practice was embedded into the teaching and learning environment. It was concluded that the picture of students' experience of involvement in assessment might not be fully captured from the one lens of assessment practice only. The picture is more dynamic and three-dimensional rather than stable or on a single plane. In order to involve students more effectively in assessment practice, we probably need to do more than just have students design the assessment task itself. There is a need to consider every aspect of teaching and

learning, and also involve others in the effort, from stakeholders, policy makers, and administrators, to teaching staff and students.

CHAPTER 9 DISCUSSIONS AND IMPLICATIONS

9.1. Introduction

Based on the findings of the previous chapters, this chapter will discuss synthetically the main contributions of this study rather than representing every single finding one by one. It begins with a brief introduction of the key themes with regards to SIA in both the quantitative and qualitative data. Some key influential factors that were believed to contribute to students' engagement with SIA are revisited and discussed under the 3P model of SIA. The significance of those influential factors on students' involvement in assessment is also explored. Besides discussion around the key findings, some individual variations that emerged in previous findings are touched on. In the implication section, the main contradictions found between the designed assessment strategies and actual practices are shared firstly. Those contradictions that were found in this study echoed some of the typical difficulties occurring in day to day practices reported by other researchers and practitioners. By highlighting those contradictions and challenges in practice, suggestions and recommendations are made within the framework of the 3P model. Finally, this chapter concludes with the reflections on the strength and limitations of this current study.

9.2. Students' approaches to studying and SIA

Although the focus of the present research was student involvement in assessment, the concept of students' approaches to studying was employed to detect the significance of SIA for student learning. Literature that supports SIA generally is in agreement on its potential benefits to the quality of learning. Students' approaches to studying are a widely adopted framework to describe students' quality of learning, which is derived from the perspective of the student (Watkins, 2001). This coincides with the principle of this research which aims to explore students' experiences in learning. Moreover, research into students' approaches to studying attempts to

describe the qualitative differences in learning rather than quantifying the learning outcomes derived from the summative assessment. The findings from previous research could be used as proof of the effects of SIA on student learning with evident benefits and constraints. It could also be transferred to investigate the quality of student engagement in SIA during learning. Finally, this concept has been widely applied in different studies, especially in the study of the ETL project from which the questionnaire of this research was adopted. In this section, the findings from this research with regards to students' approaches to studying will be discussed in comparison with the previous findings from the ETL project. The salient relationship between students' approach to learning and students' approach to SIA will also be summarised based on both quantitative and qualitative data.

As has been found in chapter four, there were four scales (as shown by Table 9.1) derived from the data of this research with regards to the students' approaches to studying. Compared with previous study from the ETL project as seen in Table 9.2, original items from monitoring studying in ETL project were included into the deep approach scale, and another new scale which related to students' intention to seek meaning and reasoning during learning was identified.

Table 9. 1: Inventory scales of students' approaches to studying in the current research

I-I. Deep approach
I-II. Surface approach
I-III. Seeking meaning
I-IV. Effective study management

Table 9. 2: Inventory scales of students' approaches to studying from the ETL project

I-I. Deep approach
I-II. Surface approach
I-III. Monitoring studying
I-IV. Organized studying and effort management

Except for a surface approach, questionnaire data showed a positive relationship between students' experiences and their views on SIA and the other three scales. In particular, both questionnaire and interview findings provided some indication that the positive experience of SIA could promote a deep approach to studying and an intention to seek meaning. Under this general picture, students' approaches to SIA were explored in interview, and it was found that the deep approach to SIA encompassed some aspects of a deep approach to learning as defined in the literature. For example, one of the characteristics as identified as deep approach to SIA was marking peers' work fairly, objectively and responsibly. Relating ideas, use of evidence, and monitoring studying were found in students' activities when they were marking their peers' work using this deep approach. Lennon's (1995) study also found that peer- and self-assessment could help foster a deeper approach to learning by encouraging students to apply theory to practice.

However, the mild negative correlation between the surface approach to studying and SIA showed in the questionnaire was not evident in the interview data. Students were found to be discouraged in learning by their negative experiences of SIA, and those students were found to be more likely to adopt surface approaches to studying as well as surface approaches to SIA.

It is worth noting that students' approach to studying may be influenced by many other factors which are not discussed in conjunction with the SIA here. Except that the evident potential benefits of promoting deep approach to studying, some other major benefits of SIA, such as boosting of self-confidence, equipping students with career and employment skills, enhanced learning opportunities were identified by students as also being also be the potential impetus for students to adopt the deep approach in engaging with SIA in learning. Surely, the positive teaching-learning environments which encourage SIA are more important impetus to promote students' deep approach to engage with SIA in learning. The next section of discussion is centred on this impetus.

9.3. Teaching-Learning Environments and SIA

9.3.1. Key scales of learning environments

There has been a growing amount of literature focusing on the teaching-learning environment and its impact on student learning, especially with studies researching students' experiences of the teaching-learning environment. Clare (2007) advocates that there is a need to switch our attention on the teaching-learning environment from the perspective of teachers and other powerful stakeholders to the perspective of students. Entwistle et al. has found that students' perceptions of the teaching-learning environment are more important to students' learning than the teaching-learning environment itself (Entwistle, McCune and Hounsell, 2003). Based on the original questionnaire of the ETL project, students' experiences and views of SIA was added to the original questionnaire in this research, and Table 9.3 shows the new scales of teaching-learning environment as perceived by students in this research.

The new scales derived from this research were found to be more similar to the analysis from a study of Hounsell and his colleagues (Hounsell et al., 2006) as shown in Table 9.4. Both Hounsell and his colleagues' analysis and the scales derived from this research distinguished the support from teachers and students, as well as separating the feedback from assessment. However, the items relating to choice remained in the scale of 'opportunities for quality learning' which was originally called 'encouraging learning' in the ETL project. The scale of 'assessment' in this research seemed to be similar to previous scales, but it emphasised more students' activity towards assessment rather than describing the nature of the assessment. It included how to prepare for the assessment, which requires understanding and critical thinking and how students deal with feedback after assessment.

Table 9. 3: Scales of teaching-learning environment as perceived by students in this research

II-I. Opportunities for quality learning
II-II. Learning supports available
II-III. Quality of received feedback
II-IV. Students' experiences and views of SIA
II-V. Aligned module organisation and structure
II-VI. Student peer support in learning
II-VII. How to do well in assessment in the module

Table 9. 4: Scales of teaching-learning environment as perceived by students in ETL project

II-I. Clear aims and curricular congruence
II-II. Choice in how and what to study
II-III Teaching which encourages understanding
II-IV. Clear and supportive guidance and feedback on set work
II-V. Assessing understanding and critical thinking
II-VI. Staff enthusiasm and support
II-VII. Student support
II-VIII. Interest and enjoyment

(from Hounsell and Hounsell, 2007)

Compared with the scales found in the ETL project, the seven new scales were found to be more effective in describing the teaching-learning environment which emphasised students' active role in learning and assessment activities. From the seven aspects, the module settings were explored in relation to students' engagement with SIA. The key influences on students' SIA with regards to the teaching-learning environment are discussed below via the framework of 3P model.

9.3.2. Key Influences on students' engagement with SIA

This section is mainly to summarise the key factors that were found to influence students in SIA under the 3P model with a focus on the factors from the teaching-learning environment provided by the module. Those key factors can be seen in the model as shown in Figure 9.1. This model represents the cycle of student learning as described in the literature review chapter. Those key factors are from the three different stages during the student learning journey respectively. In the presage, two key factors have been identified as influential to students' SIA: one is students' previous experiences in SIA, and the other is assessment design especially with

regards to the grade contribution in the design. In the process stage, the balance between students' autonomy and teachers' authority became an extremely important factor in determining which way the SIA might be taking. In the product stage, the main factors discussed are student beliefs about 'quality learning'.

Presage factors

First of all, students' previous experiences of SIA were found to be significant towards students' attitude and beliefs about SIA; therefore those precursors of SIA were found to have an influence on students' response and actions in SIA during learning. For example, students who had similar experience of one particular assessment in their previous learning, such as self assessment were found to be more willing to accept it and carry it out. Whereas, students without any previous experiences in SIA were typically more nervous about it. Furthermore, the quality of their experiences and how they experienced previous SIA also matters to students. For example, students in this study who had positive experiences in a particular strategy of SIA such as peer feedback giving were found to be more serious and responsible in peer feedback giving. Those students were also more likely to value feedback given by their peers. However, some students who had a bad experience of it, for example someone who was marked down by her peer unfairly, were found to be very resistant to peer assessment in this study. Similar findings were replicated by many other researchers' work, such as Jordan (1999), Falchikov (1996), Purchase (2000), and Davies (2002). This influential factor confirmed the current widely accepted fact that previous learning experiences do matter to later learning.

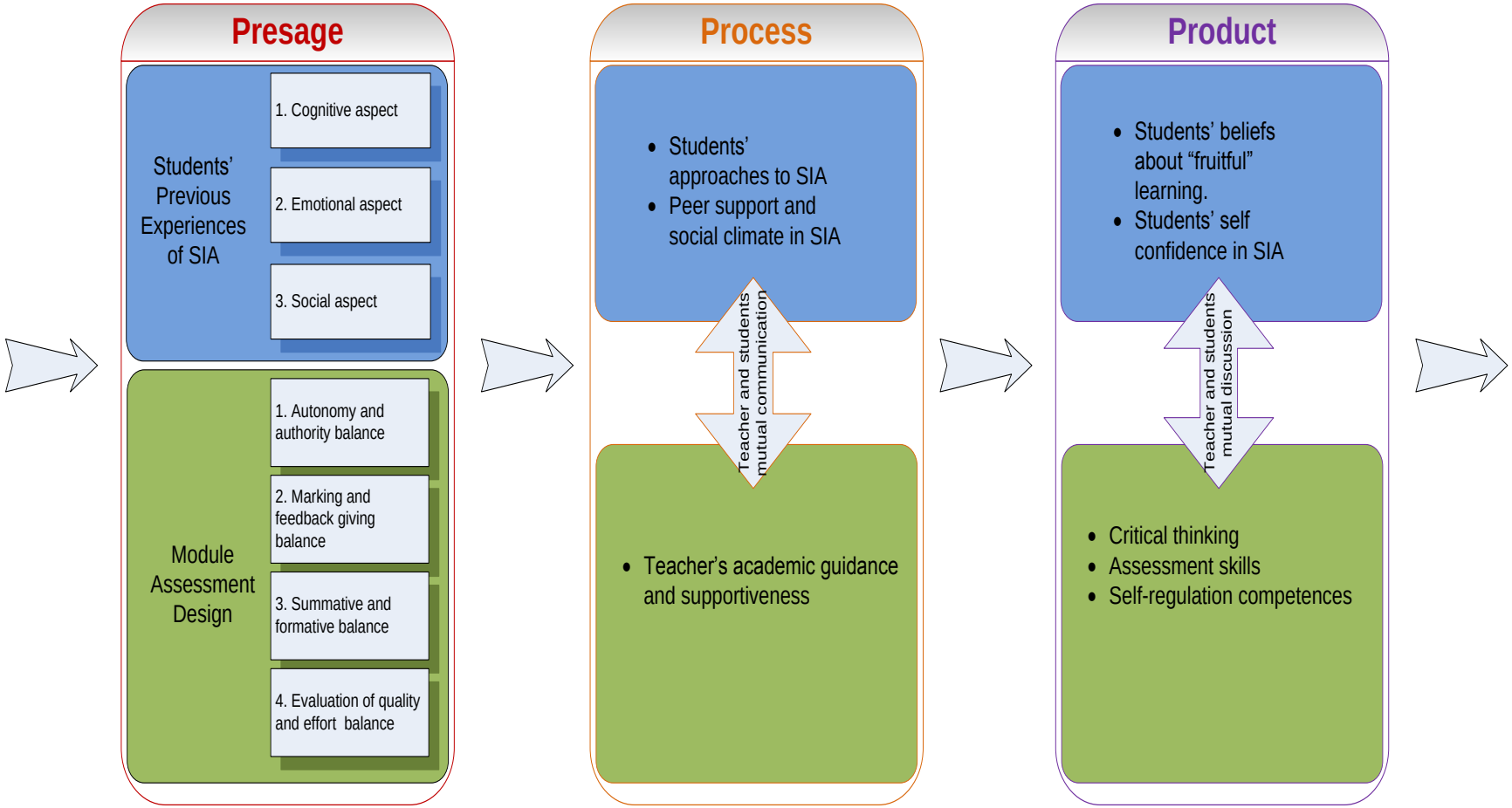

Figure 9. 1: 3P Model of SIA

This influence from previous experiences is not a simple question of whether students have had similar assessments or not, but concerns students emotional, cognitive and social experiences. Illeris (2002) has proposed that there are three interrelated dimensions of learning: cognitive, emotional and social as shown in Figure 9.2. Illeris (2002) argues that these are interaction processes between the learner and the surroundings, and inner mental acquisition and elaboration processes by which new interactions are linked to earlier learning. In other words, he admits that previous learning experiences contribute significantly to later learning. According to Illeris, the cognitive dimension comprised of knowledge and skills. The emotional dimension involves feelings and motivation. Cognition and emotion refer to the internal dimensions of students' learning where knowledge and skills are acquired. By contrast, the sociality dimension mainly involves students' interaction with the external environment including people and the context.

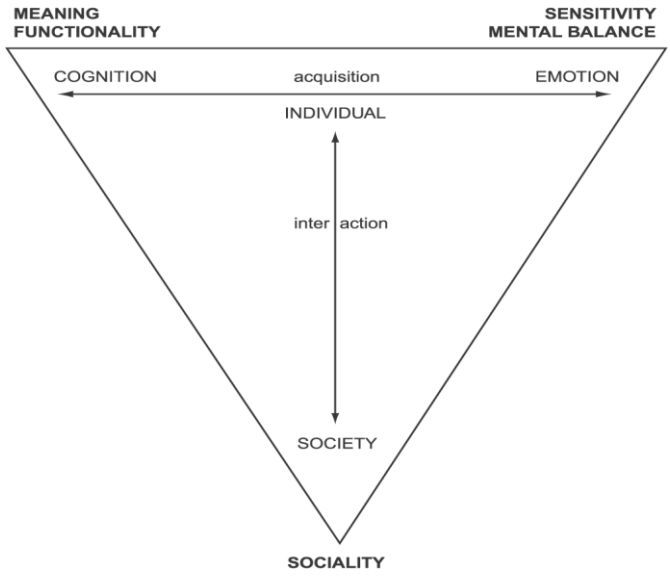

Figure 9. 2: Illers' (2002) three dimensions of learning

The second important influential factor was assessment design. The questionnaire data showed the positive relationship (.248) between the assessment scale (II-VII) and students' experiences and views of SIA (II-IV). The assessment scale contained items relating to students' understanding of how to do well in assessment, such as

critical thinking required from assessment and taking feedback on board. Items in the students' experiences and views of SIA scale described to what extent students would agree with the values and benefits of SIA in practice. It was found that students who rated higher in the assessment scale had stronger agreement with the positive role of SIA in practice. In other words, the finding suggested that the better understanding of assessment process and the greater engagement with feedback from students, the positive attitudes and beliefs of SIA would be more likely perceived by students.

However, assessment design is a broad concept, and it can mean anything associated with the assessment including the choice of methods (essay, exams, presentations, etc.), strategies (peer assessment, self assessment, etc.), the time and frequency of assessment. Findings from interview data indicated that students were concerned specifically about the design of the grading system and the autonomy and teacher's authority in the SIA design. Almost every student talked about marks or grades in the interview when they were talking about PA (peer assessment), SA (self assessment) or other kinds of assessment of SIA. For example, most of the final year students were found to be more resistant to SIA not because they did not like it, but because the mark they got would be counted in their final degree grades. Problems reported by some other researchers such as marking up or marking down could be blamed on this factor.

The balance of student autonomy and teacher authority was another tricky but common factor which many students experienced differently and there was no agreed standard on how much autonomy students should have and how much teacher's authority should influence SIA. Some students complained about having been given too much freedom such that they ended up with too many choices without the teacher's guidance. For example, students chose their own topics and formed a group of 20 people, but found they could not manage and get controlled in such big group. However, in another module, students complained about lack of space to reflect their own thinking and create their own materials because the teacher authorised every single step of activity and specified every single piece of content for each task. The

teachers' authority and students' autonomy were found to be influential to students' perceptions of SIA in the interviews. This influential relationship was also evident in the findings from the questionnaire. In the questionnaire, the scale of opportunities for quality learning (II-I) which included teaching and choices that students had in learning was found to be positively related (.297) with the students' experiences and views of SIA (II-IV).

Keeping this balance is difficult. Involving students in assessment is about giving students responsibilities, but it does not mean that students should be left to themselves without any guidance or monitoring (Falchikov, 2005). Involving students in assessment has an emancipatory component, but there should be some fundamental limitations to the amount of power the teacher can effectively cede to students. This balance also depends on many other aspects such as what level the students have reached, what the purpose of the course is, and what resources (time and teaching staff) are available for such a balance. It is crucial to students as well as teachers. For example, the group difference found in earlier questionnaire data clearly evidenced the impact of students' full-time or part-time status and the module setting on students' engagement with SIA, but with no evidence of impact from age or level of study.

If the balance were not properly weighted, it could bring some significant problems that might overtake the original designed purposes. For example, in some assessment design, there are strong elements of SIA; however the teacher's expertise is seen as a 'model answer', and peers' feedback and support may not be valued as highly as teachers'. In this case, the teachers' authority still acts heavily upon students' performance. In contrast, when students' autonomy is unsupervised and unlimited, misuse of this autonomy could distract students from using the opportunity to develop themselves for learning and provoke surface learning, for example the 'social loafer' has been evident in previous findings.

In addition to the balance of authority and autonomy, there were other three balances in assessment design found to be influential to students' SIA. The balance of

involving students in marking and feedback giving, the balance of students' involvement in summative and formative assessment, and the balance of students' involvement in evaluating the quality of work or the effort put in the work will be further elaborated in later discussion of current practices of SIA together with the implications.

Process factors

In the process of SIA, support from teaching staff in the process was found important to students for their engagement with SIA. There were three kinds of support that students mentioned in the interviews. The first is the learning materials provided by teachers, such as handouts, reading papers, or lecture notes. The second was how informative the teacher was. It contains both what kind of guidance the teacher provided and what the quality of the guidance was. For example, whether there were opportunities for students to have dialogues or conversations with the teacher, whether the teacher provided enough feedback, whether there was a conversation provided, whether the teacher was clear in explaining criteria and expectations in the conversation, or whether the teacher was explicit about her opinions on students' performance and decisions in SIA, and whether the feedback was adequate to guide students' learning and equip students with necessary assessing skills in SIA. The last kind of support students talked about in this study was more about the moral support of the teacher, such as willingness to help, kindness of caring for students, openness in sharing knowledge with students, and enthusiasm for teaching.

Those three kinds of support were actually all included in the questionnaire teaching-learning environment scales. The scale of learning supports available (II-II) described the first and last support mentioned in the interview, and the scale of aligned module organisation and structure (II-V) and the scale of quality of received feedback (II-III) described the second support identified by students in the interview. The data from questionnaires confirmed what students said about the relationship between their engagement with SIA and those supports. Students who rated higher in the learning supports items found to be more positive attitudes and beliefs of SIA. However, surprisingly, the questionnaire data showed the negative correlation (-.314)

between the scale V and the scale IV, which could mean that the more the structure of the module was clear and congruent, the less positive students' experiences and views of SIA would be. This was contrary with what was found from the interview. This was also difficult to understand with regard to previous research findings in which congruence of course organization and management (Hounsell et al., 2007) and constructive alignments in teaching and learning (Biggs, 1999) were emphasised. However, by looking closely at the items of scales IV, four items (out of six) were describing students' experiences of SIA, and only two items were about their views and beliefs. This meant that students who did not have experiences that were described by the four items would not be able to rate their agreement towards the four items. There was an option of 'not applied' in the questionnaire, and it was coded as 0 in analysis. The 'not applied' situation might contribute to the negative correlation found here, as indeed students from Module A did not have any chance to experience other forms of involvement in assessment other than the online self-assessment.

Both questionnaire and interview findings identified peer support as one of the factors that could largely influence students' SIA. In contrast to teacher's support, this support was more about moral support, such as peer attitudes towards SIA, and the learning atmosphere among peer students in a group or in a class.

Product factors

Finally, in the product stage, students' beliefs about what constitutes fruitful learning were found to be closely associated with their engagement with SIA during the process. This association has been discussed very little in past literature. Less attention has been paid to how students perceive their quality of learning compared with how one can better judge the quality of student learning in the research. A range of criteria has therefore been proposed by professionals to measure the quality of student learning. For example, Simons et al. (2000) defines the 'new learning' as the understanding of quality learning that would entail thinking independently, working in collaboration and self-regulation. However, those criteria or those assumptions about quality learning might not be valued by students yet or might not be agreed yet

by students from their point of views. For example, in the interview, it was noticed that students talked about 'fruitful learning' more rather than the 'quality learning', a point that was initially raised in my interview questions. What students described as 'fruitful learning' was found to be associated with their engagement in SIA, and some of those students' 'criteria' were found to be different from what the literature suggested. It is not necessary to repeat what previous findings showed; however, some of the salient 'criteria' identified exclusively by students might provide a different perspective from which to view the issue.

Among those themes about 'fruitful learning', the enjoyment of social interaction and gaining of friendship were highlighted by students as the important elements leading to 'fruitful learning'. However, this element has not been identified as an explicit criterion for 'quality learning' in past literature, or as an intended learning outcome designed by the three module leaders in this study. More importantly, this element of 'fruitful learning' was found to be strongly associated with students' engagement with SIA. It was found that students who enjoyed interaction with their peers during the SIA, were more likely to engage with the SIA again later. And, conversely, students who were found to engage with SIA actively were also more interactive with their peers. In fact, it made sense if we relate this to the previously identified influential factor, 'peer support'. Questions from part III in the questionnaire about students' satisfaction towards the module aimed to explore the learning outcomes perceived by students. The questionnaire data revealed that students' experiences and views of the SIA on the module were closely and positively related to every aspect of module satisfaction.

The other element exclusively identified by students was 'confidence' gained from the learning. The positive correlation between students' confidence and learning outcomes has been confirmed by many studies. However, for most of the time, the confidence that those studies reported was students' confidence in academic performance, and the relationship with the learning outcomes was normally assessed in a quantitative rather than a qualitative way. On the other hand, findings about students' confidence and its relationship with the learning product from this study

revealed what students mean by ‘confidence’ in their learning. Students in this study were found to describe ‘confidence’ as a person in general, including their ability to learn, rather than merely meaning their confidence in academic performance. “Belief in self”, “knowing oneself”, “being happy about oneself”, and “found oneself or found the direction of oneself” were extensively and frequently used in their narratives when students were talking about their confidence. Just a few students touched on their academic achievement. In general, students were viewing this ‘confidence’ in a more qualitative way rather than merely based on the quantitative mark they obtained. More importantly, this ‘confidence’ was found to be associated with the SIA they experienced.

Some other studies reported other effects, such as gender, age, and ethnicity. Neither questionnaire nor interview data showed significant difference in students’ attitude towards SIA nor experiences in SIA among those different groups. The extent or level of SIA was found not to be significantly associated with actual students’ engagement with SIA. In other words, the higher level that students were involved in the assessment might not result in students’ better engagement with SIA and learning. Students’ engagement with SIA was elaborated in details in the context of module settings (in Chapter 6, 7, and 8). It was found that students in Module C in which they were involved in the highest level of decision-making about assessment were not necessarily using deeper approach to SIA or better engaged with SIA than students in other modules in which lower level of SIA was designed.

Biggs (1999) advocates a theory of constructive alignment that supports the view that education is about conceptual change and not merely the acquisition of knowledge. This theory implies that meaning does not come from direct transmission of knowledge but is created by the student’s learning activities. Based on the theory, his 3-P model in detail analyzed how learning is constructed by the teaching-learning environment. Three parts of learning were identified in learning activities: presage, process and product. The findings in this study showed that this model was also applicable in the context of SIA during learning. Students’ previous experiences in SIA, and their engagement in SIA, and the product resulting from SIA learning

situation were found to be related each other. These three parts are related to each other, and consequently form a learning loop as shown in Figure 2.6 in Chapter 2. Based on the loop introduced earlier, newly formed 3P model of SIA shown in Figure 9.1 highlighted the influential factors of SIA that had been identified by the students in this study.

9.4. Individual variations in SIA

There were two groups of students whose backgrounds were different in some way from the majority of the student cohort. The majority of students were local British undergraduates who entered the university for degree study directly after their secondary education or gap year after school. There was a minority of students who were not in this category in terms of age and previous study background.

Firstly, in terms of age, as shown in the quantitative findings, the majority of students were aged from 18 to 25, and most of them had recently graduated from schools or colleges before entering the university to study for a degree. However there were also 9% students aged above 26, and they were defined as 'mature students'. This group of students were different not only in terms of age; more importantly they had different backgrounds which were found to contribute to their learning and engagement in SIA. They normally had a long time gap between their last learning in schools and starting their university study, and they usually had rich and extensive working experiences as well as life experiences. Most of them had families and children to take care of and some of them were still employed in a formal job either part-time or full-time. According to the findings reported previously, it was found that mature students' personal factors significantly contributed to their learning approach and their engagement in SIA compared with other external factors. In other words, they seemed to be less influenced by the external factors compared with their younger peers. For example, as detailed in the module B analysis, mature student BM176 (Julie: anonym) was found to be more open and tolerant in accept any innovative practice in SIA compared with her younger peer student BM168 (Stuart: anonym).

The other group of students were those whose previous learning context was found to be significantly different from the rest of the students. Most of those students were international or EU students who were educated in a different culture and education system, but not exclusively, for example, in the study, there was one British student who had spent her childhood and adolescence abroad and was educated in another culture, and she was categorized in this group as well. Most of them were in the same age bracket as the rest of the group, in their early 20s, and with limited work experiences before they came to the UK. Compared with other students, they were found to be more sensitive about the external factors in learning, and their engagement with SIA was found to be uncertain in some way. For example, student BM_240 (Lin: anonym) acted quite different in different modules when she was doing some kind of peer assessment. Her approach to SIA was found to be quite emotionally involved. This emotional attachment was also found in another student who was from Ireland.

Apart from that, two students in the interviews were mature and educated in another culture and system at the school level. Those two students were both female, in their middle 30s with family and children and both came from Africa. However, unlike the other international students, they had been in the UK for a long time. No such distinctive characteristics were shown by these two students particularly; however, the two were indeed similar to each other. For example, they both had strong career aspirations, and they both had high expectations for their children and wished to become their role models. They were also both found to be highly engaged with SIA compared with their peers and in contrast to the fact that they had no previous experiences in SIA. It would be risky to form any assumptions based just on two of them, as their private friendship might contribute to the similarities. However, it would be interesting, in future studies, to investigate further such a case which had so many distinctive characters.

9.5. Implications

This section brings the salient findings and central framework together to inform the pedagogical implications in the light of previous attempts to develop on assessment guidelines. Based on the problems in SIA design identified in previous discussions, now it aims firstly to provide recommendations to deal with those problems by applying the central framework of this research. Then it is followed by the implications for teacher development for supporting students in SIA, and the implications for course design.

9.5.1. Implications for SIA design

There have been many attempts to identify the 'conditions' or 'principles' under which assessment could work better. Nicol's 12 principles of good assessment and feedback (2008) and Boud's seven propositions for assessment reform (2010) are the most prominent guides on assessment practice in recent years. Comparing the two guidelines, Nicol's 12 principles are more specific guidance for teachers' everyday practices, while Boud's seven propositions are more strategic propositions from the institutional level. Stimulated by Hounsell (2010) who has tried to compare some key frameworks and guiding principles for assessment and feedback, Table 9.5 tries to categorize the two guidelines into five key aspects from both guidelines as seen below:

- a. The chief function of assessment
- b. The provision of feedback
- c. Student involvement in assessment
- d. The supportive cultures for SIA
- e. Policies at institutional level about SIA

Table 9. 5: Guiding principles on effective assessment

	Boud and associates (2010) Assessment 2020: Seven Propositions for Assessment Reform in HE. ***Assessment has most effect when …***	**Nicol (2008) Principles of Good Assessment and Feedback**
a.Formative function Summative function	1. … assessment is used to engage students in learning that is productive.	2. Encourage 'time and effort' on challenging learning tasks.
	7. … assessment provides inclusive and trustworthy representation of student achievement.	5. Ensure that summative assessment has a positive impact on learning.
b. The provision of feedback	2. … feedback is used to actively improve student learning.	3. Deliver high-quality feedback information that helps learners to self-correct. 4. Provide opportunities to act on feedback (to close any gap between current and desired performance)
c. Student Involvement In Assessment	3. … students and teachers become responsible partners in learning and assessment. iii…. Dialogue and interaction about assessment processes and standards are commonplace among staff and students. ii… Students develop and demonstrate the ability to judge the quality of their own work and the work of others against agreed standards. i ... students progressively take responsibility for assessment and feedback process.	1. Help to clarify what good performance is (goals, criteria, standards). 6. Encourage interaction and dialogue around learning (peer and teacher-student). 7. Facilitate the development of self-assessment and reflection in learning. 8. Give choice in the topic, method, criteria, weighting or timing of assessments. 9. Involve students in decision-making about assessment policy and practice.
d. The supportive cultures for SIA	4. … students are inducted into the assessment practices and cultures of higher education.	10. Support the development of learning groups and communities.
e. Policies at institutional level about SIA	5. … assessment for learning is placed at the centre of subject and program design.	12. Provide information to teachers that can be used to help shape their teaching
	6. … assessment for learning is a focus for staff and institutional development.	11. Encourage positive motivational beliefs and self-esteem.

As regards student involvement in assessment, the development of students' ability to judge their own and others' work, and the partnership of students and teachers in

taking responsibility for assessment and the feedback process were identified as important elements of SIA. However, apart from the idea of interaction and dialogue between and among staff and students that was put forward by both guidelines, it seemed that those guidelines focused more on task design which belonged only to the presage condition for the SIA. The 3P model of SIA provided a framework for the SIA design, as it acknowledged the whole process of assessment practices. Compared with previous guidelines that normally focused on the task design of SIA, 3P model of SIA focused more on the student learning experiences in the SIA process. The three stages: pre-sage, process and product could be used to inform the SIA design for better accommodation of student learning needs. In the implication of SIA task design, cooperating with the findings discussed earlier, the problems and contradictions in design of the specific strategies of SIA found in the module studied in the research are shared in this part, and its recommendations and implications are suggested.

Students may be involved in assessment in various ways. The strategies that have been used in involving students in assessment are identified in the existing literature mainly as peer assessment, self-assessment and negotiated assessment. Some literature identified 'feedback provision', and peer or self-testing as separate strategies such as the Assessment Strategies in Scottish Higher Education (ASSHE) project (Hounsell et al., 1996) and Falchikov (2005). In fact, peer or self testing, and giving feedback to peers or oneself can be seen as different ways of peer, or self-assessment. However, group work has not been identified as a strategy for involving students in assessment. It can be argued that a group is the vehicle of peer assessment, as peer assessment often takes place in the context of group work. However, group work has been widely used in current higher education (Falchikov, 2005), more and more other elements of assessment can be incorporated into group work, such as self-reflection on group work. Furthermore, group work itself can be seen as a useful strategy of assessment which can be used to assess team working skills, communication skills, and often decision making skills.

This section will mainly discuss the various strategies that were used in the three different modules. It covers formative peer feedback giving, peer marking, online self-testing, self-reflection, self-designed assessment which is similar to negotiated assessment, and group work. In the present study, some modules used more than one of these strategies, while some used only one. However, of those students whom I interviewed, most have experienced at least two of these strategies in their past or present learning. From their responses, as presented in previous finding chapters, they revealed their experiences in dealing with each strategy. There were some stories with happy endings, but there were also some stories that are more complex than a happy feeling. These complex stories with 'contradictions' are discussed in this section, as they are interesting and valuable to our practices. What students told me about those experiences were neither what the designed strategies of assessment outlined nor what the module teacher expected. Falchikov (2005) also described one of those 'contradictions' in SIA. She admitted that teachers who used those strategies to involve students in assessment found themselves in conflict over assessment, the needs and rights of students, and the demands of the system.

Table 9.6 summarises the contradictions between the assessment intentions designed by the teacher and assessment intentions perceived by students. It provided the specific SIA strategies that have been found to be used in SIA in the present study with the designed intentions of the module designer according to the information provided in the module handbook. The column under 'actual practices' is the explanation of this SIA practice based on course information, gained from talking with module leaders, and what was said in interviews. Based on what has been reported in the previous findings chapters, especially according to the in-depth module analysis, the apparent contradictions of the SIA intentions that are designed by the teacher and that are perceived by students on the module are summarised from the qualitative findings in the last column. It is important to be aware that the contradictions summarised in this table (Table 9.6) do NOT represent all the students and all the situations in this study, only represent the most significant and interesting outcomes reported by some students. These contradictions might be individual norms, but emerged in this study.

Table 9. 6: Contradictive assessment intentions

	Designed strategies	Assessment intentions designed by the teacher	Assessment intentions perceived by students
a.	**Formative peer feedback**	To enhance students' understanding of assessment criteria by judging the quality of peer's work.	Tension between quality judgement and effort monitoring
b.	**Peer marking**	To judge the quality of peer's work in order to enrich students' understanding of quality work by giving a grade. To monitor group work.	Tension between judgement of the work and cognitive learning and judgement of the person and social relations.
c.	**Online self continuous testing**	To foster students' self-regulation in learning from formative assessment for learning.	Tension between formative assessment for learning and summative assessment focusing on getting high grades and marks.
d.	**Self reflections**	To provoke critical thinking and appraise skills and to feed forward for next learning experiences.	Tension between assessment as learning and summative assessment focusing on getting the higher marks and grades.
e.	**Self designed assessment**	To develop students' broad-based skills (such as critical thinking, management skills) in practice by giving them considerable autonomy in assessment and learning.	Tension between autonomy of SIA and amount of support and guidance students needed.
f.	**SIA through Group work**	To equip students' team skills, communication skills and decision-making skills. To create a learning community that could enrich students' learning experiences.	Tension between focus on learning process (of enjoying the group work) and focus on learning product (of getting work done).

The first strategy (as shown in Table 9.6) of using peer feedback for formative purposes is in the context of a privileged emphasis on feedback since Black and Wiliam (1998). They proposed the formative function of feedback in student learning. Various researchers had been advocating the importance of feedback, such as Boud (2000), Carless (2007), Nicol (2008), and Hounsell (2003, 2007, 2010). Therefore, involving students in feedback has been strongly recommended by educationalists over the decades such as Falchikov (1994, 1996, 2005), Tsai et al. (2002), Catterall (1995) and Lin et al. (2001). Their principal reason for using this strategy in assessment is to enhance students' understanding of assessment criteria and quality work. The intention was to involve students in judging the quality of each other's work, and to provide constructive feedback on the quality of peer's work. However,

in the findings, most of the students found their peer's feedback was more about the effort made, rather than the quality of their work. Also most of the students were found to judge each other's work especially when judging group member's work, based on their effort rather than the quality of the work. The reason might be that students found it difficult to judge the quality. This was found in previous studies where some students admitted their doubts about their capacity to judge the quality of someone's work. This was evident with Falchikov's (1994) findings in her experiment in peer feedback marking (PFM) in which she found a difference between students' feedback and tutor's feedback. The former emphasized presentation and delivery, while the latter gave more emphasis to methodological issues and understanding.

Another reason might be the students' perception of this strategy. Some students reported that they did not believe in or trust peer's feedback which might mislead them. With this perception in their mind, some students may not value peer's feedback, so they do not see the constructive or positive sides of their peer's feedback.

The second contradiction was found in peer marking where grading was involved. As peer marking is one type of peer assessment, the principal intention was more or less the same as feedback giving. However, this strategy was used by two modules in this study, and both of them used it in the context of group work. Therefore another intention of the module leader was to promote peer monitoring in order to motivate group work. However, in actual practice, many students complained about their work being marked in a biased way. Two extremes of biased marking were found in this study. One was friendship marking where students marked up peers' work or each others' work because of their good personal relations. The other situation was that students' work was marked down because of 'bad' relations or simply to avoid giving a relatively higher mark than one's self received. These two situations resembled the findings from many researchers' works. For example, Lapham and Webster (1999) reported that 'prejudice, favouritism, friendships and ethnic division led to collaboration over marks and mark fixing' in their study of peer assessment of

seminar presentations. While Tsai et al. (2002) reported that some students gave very low scores to a peer so as 'to keep his or her achievement at a relatively high level'. This was exactly what one of the informants in the interviews said about her experience of peer marking : ''*so they won't mark anyone up because they feel (that) by marking someone up they are marking themselves down….a lot of people are playing the game of the marking system."(BM243)*

One reason could be what Alderson and Wall (1993) called 'backwash' of assessment or what Rowntree (1977) referred to as 'side-effects', and in the situation of biased marking, it was the mark or grade that students got. There has been a lot discussion on this issue, and some solutions have also been suggested by different researchers. For example, Falchikov (2005) in her book concluded that it was important to maximize student responsibility and ownership to deter students from collusion. Boud (1989) suggested that teacher's moderations on students' awarded marks should be in place to encourage students to justify their decisions. He also raised the question of whether and when students-awarded marks should be used for formal grading purposes.

The third contradiction happened in online self-testing where students were required to do continuous assessment via online tests and record their score themselves. The intention of this module leader was to foster students' self-regulation by self-assessing online week by week, so that students would become accustomed to study regularly. However, some students were found doing the tests near to the deadline and without revision but with a book open just to get a higher mark rather than practising or testing themselves on their knowledge. The incentive of getting higher marks was similar to what was discussed earlier in peer marking, because the score of online self-tests contributed to the formal assessment. The mark was supposed to reflect students' performance and understanding of course material; however, if students were not assessing themselves in a proper way, the marks might not be able to serve the purpose but might even mislead the students and teachers. For example, some students were found doing the tests with the book open or with the assistance of other students. These students might get a very high mark which would appear as

if they did well in this area. The teacher might use the information to assume there was no need to revisit this area of study.

The fourth contradiction came from another method of self-assessment which was self-reflection. This strategy could be seen as giving feedback on one's own work, but the feedback itself was part of the assessment task. The main intention of the module leader who used this strategy was to provoke critical thinking and self-appraisal skills and to feed forward for the next learning experiences. This strategy has not been discussed as frequently as other strategies for involving students in assessment, though it has been widely used in practice. To the majority of the students I interviewed in this study showed a rather careless or superficial attitude towards this strategy. As far as they were concerned, they did this because it was required.

The fifth was found in self-designed assessment where students were required to design their own assessment tasks and learning objectives by consulting and negotiating with the teacher. There are many different methods of self-designed assessment or negotiated assessment that have been used. Some practices let students design or negotiate the assessment criteria, some let students decide the weightings of marks awarded; some let students draw up learning objectives; some even let students design their own tasks. To conclude, this kind of strategy requires students to make some important decisions on their own in the initial assessment design stage rather than be passively assessed as the educational products at the end by teacher's decision. This strategy was identified by Brew's typology (1999) as the highest level of involvement and it was referred to an emancipation of power from teachers by Falchikov (2005) or 'empowerment' to students identified by Leach et al. (2001).

What these authors are describing is based on the outcomes of this strategy from the teacher's point of view. There are other possibilities for learning, from the student's point of view, which were not entirely fulfilled in the course settings surveyed but which would merit further research. By this strategy, students were involved in decision making and critical thinking from the very beginning of the assessment

process. This could make it easier for students to get involved in giving feedback or marking as discussed in previous strategies. This is what Serafini (2000) argued about the concept of 'assessment as enquiry'. In this paradigm, students become involved in the decision-making in assessment, and the decision-making itself provides the learning opportunity, and turns the assessment process into a learning process. From the findings as described in the previous chapter, it was found that this 'learning' included two aspects of the learning processes. One is the process of learning to be independent learners such as acquiring assessment skills, regulation skills, and management skills which were associated with decision making. The other aspect of learning was what literature normally referred to as 'subject knowledge'.

In previous studies, this kind of strategy was normally used in criteria design in which students were involved in selecting, or generating criteria collaboratively either with peers or the teacher. Therefore, there had been quite a lot of discussions around the SIA in criteria. By contrast, in this present study, students were involved in designing every aspect of the assessment except the criteria. It was found in practice from this study that the teacher marked students' self-designed assessment tasks with no explicit criteria. That was probably the key reason for such contradiction according to what students said about their experiences of this strategy.

Students were supposed to develop their own innovative assessment tasks in order to accommodate their self-guided learning. As in the module, there were no formal lectures; what the teacher intended to do was to use students' knowledge of this subject to develop their further broad-based skills that were essential to this profession. It was found that in actual practice most of students were unsure about what they were supposed to do. One of the strategies that students came up with was to copy the assessment methods from their previously experienced modules. One distinctive feature of what students said about their experience in this case was that they kept on *'guessing what the teacher wants from us?'* This revealed that students did not fully understand that they should think about what they wanted rather than what the teacher wanted. On the other hand, it also revealed that explicit criteria and

communication between the teacher and students were to some extent absent in this module.

The last contradiction was found in group work assessment where collaborative learning should be encouraged. However, some students were found to be isolated in learning or absent from learning. Group work was used in two modules in the present study, and two main kinds of voice dominated among students. One group of students found themselves disconnected from their group and lacked a sense of group identity. Another type of voice was to complain about the 'free rider' in their group. In both situations, the original intention of the group work strategy was not fulfilled.

Many scholars have realised the variation and complexity of group work. Acknowledged problems to date mainly include unfair grading awarded and student reluctance to participate, student discomfort with group members. Nevertheless, those problems in group work could be mirrored in two kinds of voice in this study. All the problems mentioned here could be divided into two types of concern. One is concern about the community of learning, and the other is concern about fair grading. For example, student discomfort with group members could be caused by lack of communication and group identity. The claim about 'free rider' in fact was the claim of unfairness of grades awarded. However, those two concerns were not necessary separate from students' claims. Some students might complain about a certain problem because of their concerns of both. The essence of those problems was found to be caused by two types of behaviour in group work: isolated learning and absent learning.

Therefore, to avoid those problems and two types of behaviour in group work, it is important to understand the students' concerns. In this study, it would be a good community of learning if it gave students a sense of group identity for their collaboration, and a fair grading system to encourage students' participation.

Those six contradictions in the actual practice of SIA discussed above were what had emerged from the previous findings. They may not be able to conclude completely

what is going on with the SIA practices, nor to include all the problems of SIA practices in reality, but those six contradictions could focus our attention on the possible disjunction between design and practice in SIA.

To conclude those key findings of this study, two contrasting versions of 3P model of SIA were developed as shown Figure 9.3 and Figure 9.4. The two figures represent the context in which students' engagement with SIA might be supported or hindered. In other words, the two figures synthesise the key factors that will influence students' engagement in SIA from what has been discussed earlier.

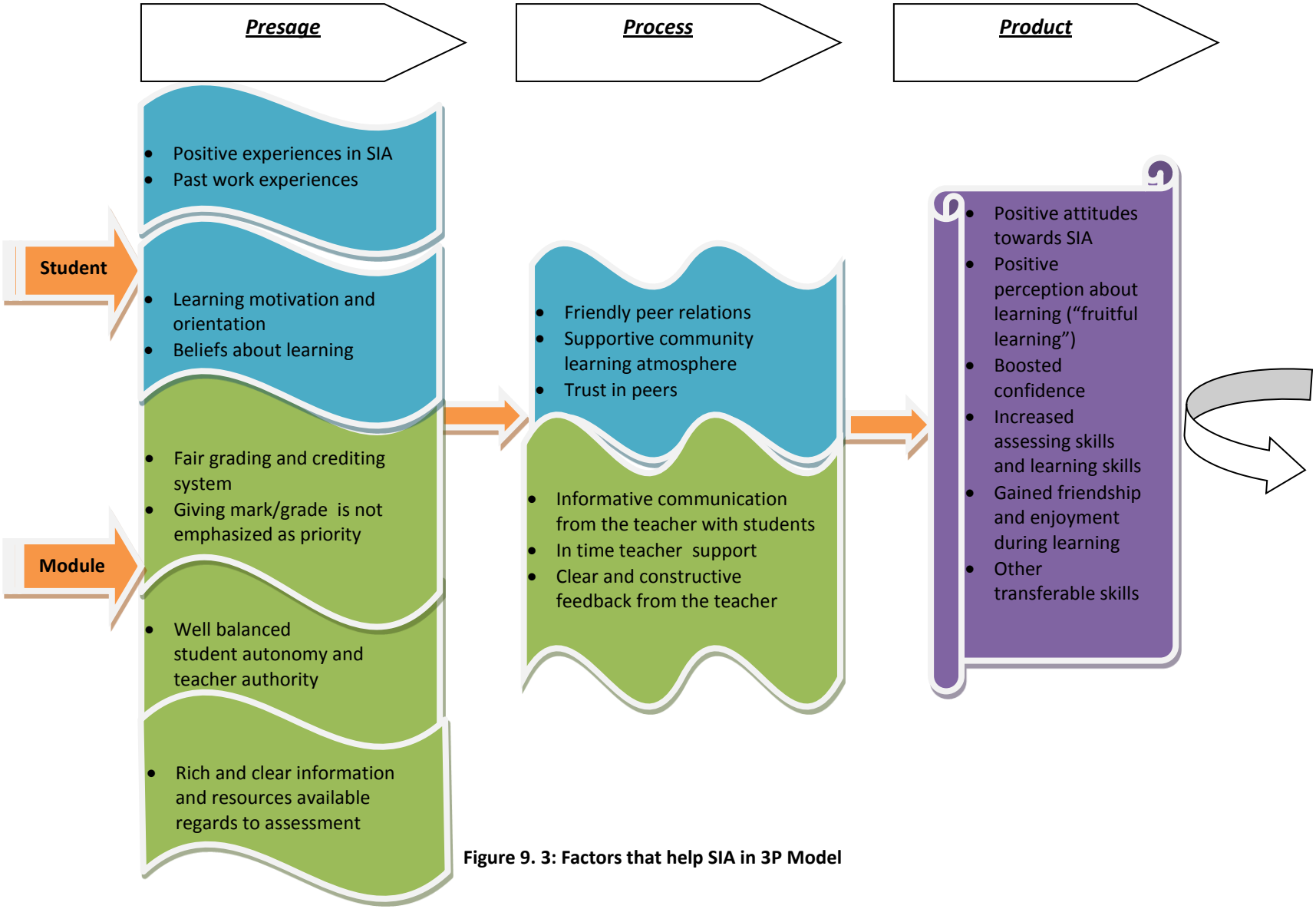

Figure 9. 3: Factors that help SIA in 3P Model

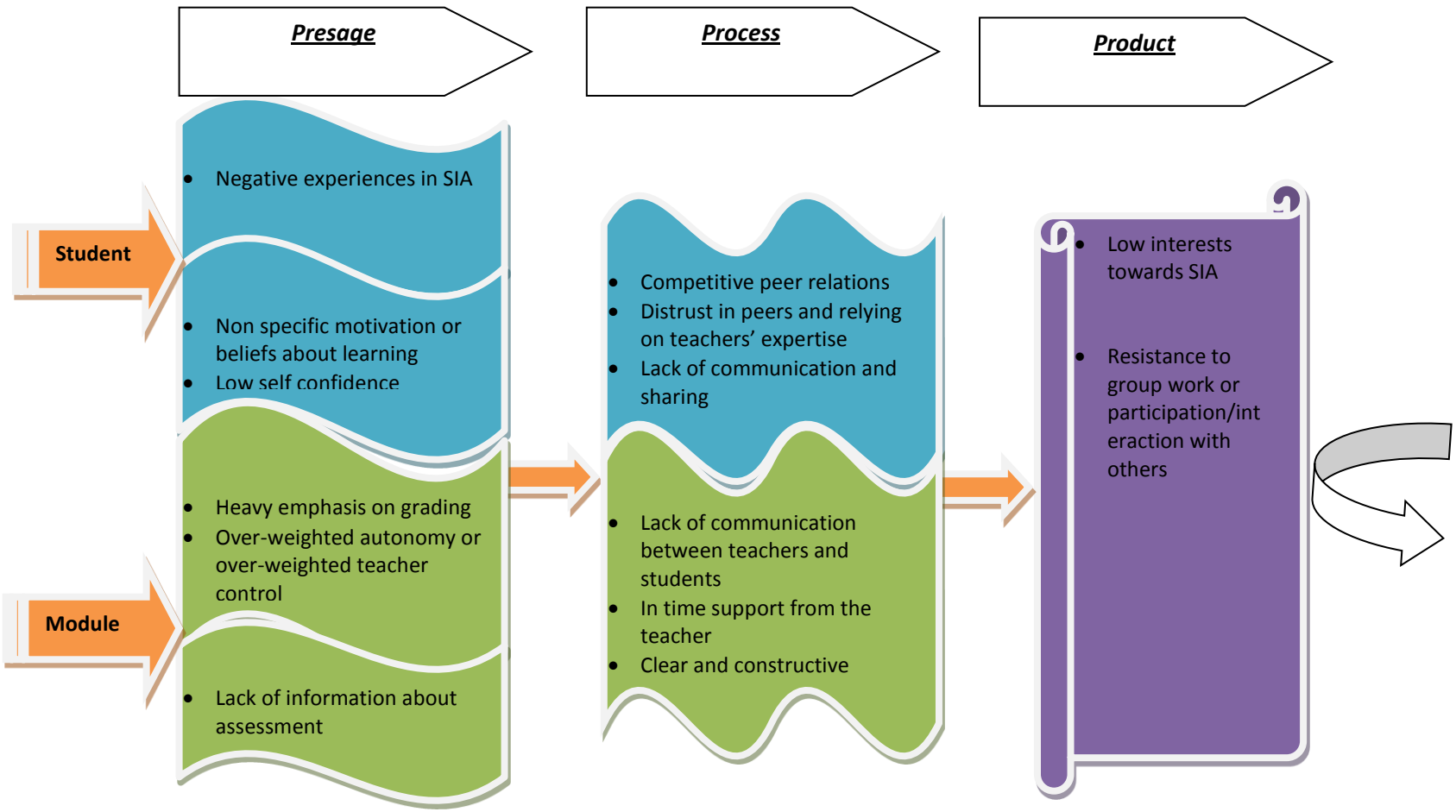

Figure 9. 4: Factors that hinder SIA in 3P Model

9.5.2. Implications for teacher training on supporting students' SIA

Another important outcome of this research is the implications in teacher development in supporting students' SIA. As discussed in the first implication, the guidelines in Table 9.5 are very useful for teachers' everyday practices to solve the problems in SIA. Besides the 3P model is also a good way of thinking for teachers to develop their skills and strategies in supporting students in SIA, the social dimension and emotional dimension of student learning that emerged from the findings also provide additional perspectives for teachers to help and support students. In general, teacher development in higher education seems to focus more on better understanding student cognitive development. The social and emotional perspectives of assessment have been recognised by some studies, although the understanding of those experiences is still limited (Boud and Falchikov, 2007). However, in recent years, the social dimension has been raised in the assessment issue. In Nicol's (2008) principles for good assessment and feedback, the integration of social experiences and academic experiences in assessment was recognised and promoted. Together with the 3P model of SIA as described in Figure 9.1, supporting students in SIA could be done in presage, process and product stages, and from the cognitive, social and emotional dimension.

Taking feedback provision as an example: in the presage stage, the teacher could support students by training them how to provide quality feedback; during the process, the teacher could communicate with students when and where the feedback is mostly needed to support their learning; at the product stage, the teacher could support students in clarifying the meaning of feedback and help them in effective usage of feedback. During the support in feedback, except for the cognitive learning from the feedback, the teacher should also be aware of the social process and emotional effects of the feedback. For example, in which way the feedback giving could be more comfortable for students to receive: anonymously written format or oral format; in what tone the feedback could be more encouraging for students'

learning and engagement with SIA rather than in danger of discouraging students' SIA.

For the teacher development in supporting students, some implications can also be drawn from the findings of individual variations. The idiosyncratic context is also important to bear in mind in teachers' practice when supporting students in SIA. For example, how better to support international students and mature students, and how better to support those students when computer technology is used, and what kind of support could be given in group work situation. Boud (2010) also explicitly noted the issue of inclusivity of assessment in his propositions for assessment reform. He argued that assessment practices should be carefully structured in order to make successful transitions from schools to university and from workplace to university for the diverse students.

9.5.3. Implications for course design

The final implication is that the way of analysing SIA in this research could be used in course design. This research analysed different SIA strategies in different module contexts by applying the 3P model of SIA. Not only was the picture of assessment process captured in this framework, the process of learning and teaching could also be apparent in this framework.

The key message of this research that is shown in Figure 9.1 indicates that every stage of student learning needs to be taken into account when designing a course assessment, in order to get a successful and positive learning experience from SIA practice. More importantly, from this model, it can be seen that teaching, learning and assessment are three indivisible parts of designing the course and the course assessment strategy. Biggs and Tang (2007) argued for the idea of the constructive alignment of teaching, learning and assessment as described in Figure 2.1 (in the Chapter 2). It indicates that the assessment has to be aligned with the intended teaching outcomes, and learning activities have to be aligned with the assessment tasks.

9.6. Strengths and Limitations of This Research

Upon this point, the most significant findings and themes have been highlighted in the discussion chapter, and the most valuable implications have been suggested above. To conclude this chapter as well as to close the whole thesis, this part will outline the most salient characteristics of the research very briefly and then draw out the limitations of this research. Finally the potential research directions for future study in this area will be recommended.

The first characteristic is that this research is based on student perspectives using the students' voices to reveal the students' experiences of SIA. Gibbs (2004) pointed out that most of the course evaluations focused on what teachers did, but this research provided a way of evaluating the course with a focus on what students did. Secondly, this research employed Biggs' 3P model to investigate student learning experiences in SIA from cognitive, social and emotional dimensions. As Gibbs (2004) noted when the public and QAA were talking about assessment, for most of the time, they focused more on learning outcomes and saw assessment as measurement; however, this research examined assessment practices in SIA with the focus on the learning process and with a proposition of assessment as learning. The third characteristic is the marriage of quantitative and qualitative study in this research. The reason and design of such mixed research methods have been explained in detail in chapter three. Finally, the in-depth module analysis has provided a close insight into students' experiences of SIA in each distinctive module context.

Although this research was carried out in Business and Management Schools, there are potential implications, discussed earlier in this chapter, that are seen to be transferrable to other programmes. However, this does not mean that the generalization of the findings in this study is high enough to guarantee that similar findings would be found in other samples. The transferability to other degree programmes would depend on the specific context such as the nature of the subject, scale of students, and the organization of teaching and so on. The lack of confidence in generalization is one of the limitations of this study.

First, the unitary degree background of sample students limited the generalization to some extent. However, as explained in chapter 3, the representativeness of the business and management programme was thought to be better than some degree programmes, as the various forms of assessment method used by both science degrees and social science degrees can be found in business and management degrees. Secondly, the sample size is limited in some of the chosen modules, especially in Module C where only 15 respondents participated in the questionnaire and only 3 respondents participated in the interview. This brought an imbalance in the dataset in terms of the numbers of participants of the three modules. Thirdly, because of the nature of the research, data had to be collected after students had finished their modules, and the ideal time would have been as soon as the module was finished and right after the final assessment. Owing to the time restrictions, some of the data collection was not ideal. For example, some data collected was from the respondents who participated in the module some time ago even in the previous semester. Those respondents were found to be blurry in their memories of some points. However, Seale (1999) has argued that generalization is not always the main consideration in research studies, as no research can be done in a perfect way, and it is the audience's responsibility to justify the relevance of the findings in different situations.

Taking into account those limitations mentioned above, it would be valuable for future study to consider including more variety of degree programme in the data collection. Other than this, as the prior aim of this study was to investigate students' experiences of SIA, students' self-reported questionnaires and individual interviews were the only data sources. However, in the interview, it was learned that there were some other data such as students' self-reflection journals, portfolios, and online discussions that could be valuable and worthwhile for the study if they could be accessed and collected. Other than this, the teachers' perspectives and views in SIA would be an interesting lens for comparison if further study followed.

References:

Anfara, V., & Mertz, N. (2006). Introduction. In V. Anfara, & N. Mertz (Eds.), *Theoretical Frameworks in Qualitative Research* (pp. xiii-xxxii). Thousand Oaks/ London/ New Delhi: Sage.

Alderson, C. and Wall, D. (1993). Does washback exist? *Applied Linguistics*, 14 (2): 115-129.

Field, A. P. (2009). Discovering statistics using SPSS: and sex and drugs and rock 'n' roll (3rd edition). London: Sage.

Anfara, V. A. and Mertz, N. T. (2006). (Eds.). Theoretical frameworks in qualitative research. Thousand Oaks, CA: Sage

Astin, A.W. (1984). Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Personnel*, 25, 297-308.

Baeten, M., Dochy, F., and Struyven, K., (2008). Students' approaches to learning and assessment preferences in a portfolio-based learning environment. *Instructional Science*, 36 (5-6): 359-374.

Barnett, R. (1992) Linking Teaching and Research: A Critical Inquiry. *Journal of Higher Education* , 63(6):619-636.

Barnett, R. (1994). Power, Enlightenment and Quality Evaluation, *European Journal of Education*, 29 (2):165-179

Barnett, R. (1997). Beyond Competence in Coffield, F, and Williamson, B (eds), *Repositioning Higher Education*, Buckingham: Open University Press

Bazeley, P. (2009). Integrating data analyses in mixed methods research [editorial]. *Journal of Mixed Methods Research*, 3(3): 203-207.

Biggs, J. (1979). Individual differences in study processes and the quality of learning outcomes. *Higher Education*, 8 (4), 381-394.

Biggs, J. (1987a). Student Approaches to Learning and Studying. Hawthorn: Australian Council for Educational Research.

Biggs, J. (1989a). Approaches to the enhancement of tertiary teaching. *Higher Education Research and Development*, 8(1), 7-25.

Biggs, J.B. (1994b). Student learning research and theory: Where do we currently stand? In G. Gibbs (ed.) *Improving* student *learning: Theory and practice*. Oxford: The Oxford Centre for Staff Development.

Biggs, J. (1999). Teaching for Quality Learning at University. Beckshire: Society for Research into Higher Education.

Biggs, J. and Tang, C., (2007). Teaching for quality learning at university: what the student does (3rd edition). Beckshire, New York: Society for Research into Higher Education & Open University Press

Biggs, J., (2001). Enhancing learning: A matter of syle or approach? In Sternberg, R. & Zhang, L. (Eds.), Perspectives on thinking, learning, and cognitive styles. London: Lawrence Erlbaum.

Birenbaum, M. and Dochy, F. (eds) (1996). Alternatives in Assessment of Achievements, Learning Proess and Prior Knowledge. Boston, Dordrecht and London: Kluwer Academic Publishers.

Black, P. and Wiliam, D. (1998) Inside the black box: raising standards through classroom assessment, Phi Delta Kappan International. http://blog.discoveryeducation.com/assessment/files/2009/02/blackbox_article.pdf (date last accessed-19/02/2012)

Bloxham, S. and Boyd, P. (2007). Developing Effective Assessment in Higher Education: A Practical Guide. Berkshire: Open University Presss.

Bloxham, S. and West, A.(2007). Learning to write in higher education: students' perceptions of an intervention in developing understanding of assessment criteria. *Teaching in Higher Education*, 12(1):77-89.

Boekaerts, M., (1999). Self-regulated learning: where we are today. *International Journal of Educational Research*, 31:445-457

Boud, D. (1988b). Moving towards autonomy in Boud, D (ed.) *Developing student autonomy in learning. (second edition)* London: Kogan Page (second edition) (17-39). London: Kogan Page

Boud, D. (1989). The role of self-assessment in student grading, *Assessment and Evaluation in Higher Education*, 14(1):20-30.

Boud, D. (1995a). Enhancing Learning through Self-assessment, London and Philadephia: Kogan Page.

Boud, D. (2000). Sustainable assessment: rethinking assessment for the learning society. *Studies in Continuing Education*, 22(2): 151-167.

Boud, D. (2006). Aren't we all learner-centred now? The bittersweet flavour of success in Paul Ashwin (ed), *Changing Higher Education: The development of learning and teaching*, London: Routledge.

Boud, D. (2010). Assessment for developing practice in Higgs, J., Fish, D. Goulter, I., Loftus, S., Reid, J-A. and Trede, F. (eds), *Education for Future Practice*, Sense Publishers, Rotterdam.

Boud and Tyree, (1979). Self and peer assessment in professional education: a preliminary study in law, *Journal of the Society of Public Teachers of Law*, 15(1):65-74.

Boud, D. and Walker, D. (1991). Experience and Learning: Reflection at Work. Geelong: Deakin University.

Boud, D. and Falchikov, N. (2006). Aligning assessment with long-term learning. *Assessment and Evaluation in Higher Education*, 31(4):399-413.

Boud, D. and Falchikov, N. (Eds.) (2007). Rethinking Assessment in Higher Education: learning for the longer term. London and New York: Routledge.

Boud, D. and Associates (2010). Assessment 2020: Seven propositions for assessment reform in higher education. Sydney: Australian Learning and Teaching Council.

Brew, A., (1999). Towards autonomous assessment: using self-assessment and peer assessment, in Brown, S. and Glasner, A. (eds) *Assessment Matters in Higher Education*, Buckingham: Society for Research into Higher Education and Open University Press.

Brew, C.; Riley, P.; and Walta, C., (2009). Education students and their teachers: comparing views on participative assessment practices, *Assessment & Evaluation in Higher Education*. 34(6): 641-657.

Brockbank, A. and McGill, I. (1998). Facilitating Reflective Learning in Higher Education, Buckingham: SHRE/Open University Press

Brown, S. and Knight, P. (1994). Assessing Learners in Higher Education, London: Kogan Page

Brown, G., Bull, J., and Pendlebury, M. (1997). Assessing Student Learning in Higher Education. London: Routledge.

Bryman, A. (1988). *Quantity and Quality in Social Research*. London: Unwin Hyman.

Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative Research*, 6(1): 97-113.

Carless, D., (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219 – 233.

Carless, D. (2007). Learning-oriented assessment: Conceptual basis and practical implications. *Innovations in Education and Teaching International*, *44*(1), 57-66.

Carless, D., Joughin, G., Liu, N.F., & Associates (2006). How assessment supports learning: Learning-oriented assessment in action. Hong Kong: Hong Kong University Press.

Catterall, M. (1995). Peer learning research in marketing in Enhancing Student Learning through Peer Tutoring in Higher Education, Jordanstown: University of Ulster, Educational Development Unit.

Clare, B., (2007). Promoting deep learning: a teaching, learning and assessment endeavour. *Social Work Education*, 26(5):433-466.

Costello, A. B. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis, *Practical Assessment, Research & Evaluation*, 10, (7). http://pareonline.net/pdf/v10n7.pdf (last access date: 13-03/2012)

Creswell, J. W. (1994). Research Design: Qualitative and Quantitative Approaches. Thousand Oaks, CA: Sage.

Cresswell, J. W. (2007). Qualitative Inquiry and Research Desing: Choosing Among Five Approaches. (2nd edn). Thousand Oaks, CA: Sage.

Creswell, J. W. (2009). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. (3rd edn). Thousand Oaks, CA: Sage.

Creswell, J., and Clark, V. (2007, 2011). Designing and Conducting Mixed Methods Research. Los Angeles/ London/ New Delhi/ Singapore/ Washington DC: Sage.

Cuffe, N. & Jackson, S. (2006). Engaging students in the implementation of criterion referenced assessment in first year law. In Dopson, K (Ed.) *Proceedings of the FYHE Conference 2006*, 12 - 14 July 2006, Australia, Queensland, Gold Coast. http://eprints.qut.edu.au/24378/

Davies, P. (2000). Computerized peer assessment, *Innovations in Education and Training International*, 37,4: p.346-355.

Davies, P. (2002). Using student reflective self-assessment for awarding degree classifications, *Innovations in Education and Teaching International*, 39(4):307-319.

Davies, W. M., (2009). Groupwork as a form of assessment: common problems and recommended solutions. *Higher Education*, 58 (4): 563-584.

Denzin, N. and Lincoln, Y. (eds.) (2000). *Handbook of Qualitative Research*. 2nd edn, Thousand Oaks, CA: Sage.

Dochy, F., Segers, M., and Sluijsmans, D., (1999). The use of self-, peer and co-assessment in higher education: a review. *Studies in Higher Education*, 24,3: p.331-349.

Donald, J. and Denison, D., (2001). Quality assessment of university students: student perceptions of quality criteria. *The journal of Higher Education*, 72(4): 478-502.

Driessen, E. & Van der Vleuten, C.P.M. (2000). Matching Student Assessment to Problem-Based Learning: lessons from experience in a law faculty. *Studies in Continuing Education*, 22(2): 235-248.

Earl, L.M.(2003). Assessment as Learning: Using Classroom Assessment to Maximize Student Learning. California: Sage.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14, 532-559.

Eisenhardt, K. M. (2002). Building theories from case study research. In Huberman, M. A. and Miles, M. B. (2002) *The qualitative researcher's companion*. London, Sage.

Ellis, R. and Calvo, R., (2004). Learning through discussions in blended environments. *Educational Media Internatinal*, 41(3): 263-274.

Entwistle, N. (1998). Approaches to learning and forms of understanding, in Dart, B. & Boulton-Lewis, G. (eds),*Teaching and learning in higher education: From theory to practice,* Melbourne: Australian Council for Educational Research.

Entwistle, N. (2000). *Approaches to studying and levels of understanding: the influences of teaching and assessment* in Higher Education: Handbook of Theory and Practice (Vol. X), Ed. J.C. Smart, pp. 156-218, New York: Agathon Press, 0-87586-128-8.

Entwistle, N. and McCune, V. (2004). The conceptual bases of study strategy inventories in higher education. *Educational Psychology Review*, 16(4): 325-346.

Entwistle, N., McCune, V. and Hounsell, J. (2003). Investigating ways of enhancing university teaching-learning environments: measuring students' approaches to studying and perceptions of teaching. In *Unravelling basic components and dimensions of powerful learning environments.* E. De Corte, L. Verschaffel, N. Entwistle, & J. van Merrienboer, (Eds.) Oxford: Elsevier Science.

Entwistle, N. and Ramsden, P. (1983). *Understanding Student Learning*, London and Canberra: Croom Helm.

Erwin, T.D (1991). Assessing Student Learning and Development, San Francisco, CA: Jossey Bass.

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation, 10*(7), 1-9.

Falchikov, N. (1994). Learning from peer feedback marking: student and teacher perspectives. In *Group and interactive learning* . Foot H. C, Howe C. J, Anderson A, Tolmie A. K, & Warden D. A (Eds.), Southampton and Boston: Computational Mechanics Publications

Falchikov, (1996). Improving learning through critical peer feedback and reflection, *Higher Education Research and Development*, 19:214-248.

Falchikov, N. (2004). Involving students in assessment. *Psychology Learning and Teaching*, Vol. 3(2), pp. 102-108

Falchikov, N. (2005) Improving Assessment Through Student Involvement London and New York: RoutledgeFalmer.

Falchikov, N. and Boud, D. (1989). Student self assessment in higher education: a meta-analysis. *Review of Educational Research*, 59 (4), pp. 395-430.

Freeth, D. and Reeves, S., (2004). learning to work together: using the presage, process, product (3P) model to highlight decisions and possibilities. *Journal of Interprofessional Care*, 18 (1):44-56.

Gammon and Lawrence, (2006). in learning in Bryan and Clegg (ed.) Innovative Assessment in Higher Education. London and New York: Routledge.

Gibbs, G. (1999) Using assessment strategically to change the way students learn. In Brown, S. & Glasner, A. (Eds) *Assessment Matters in Higher Education: Choosing and Using Diverse Approaches* . Buckingham: SRHE/Open University Press.

Gibbs, G. (2007). Analyzing Qualitative Data. Los Angeles/ London/ New Delhi/ Singapore/ Washington DC: Sage.

Gibbs, G., (2006). How assessment frames student learning in Bryan and Clegg (ed.) Innovative Assessment in Higher Education. London and New York: Routledge.

Gibbs, G and Simpson, C., (2004) Conditions under which assessment supports students' learning? *Learning and Teaching in Higher Education*, 1, 3–31.

Gijbels, D., & Dochy, F. (2006). Students' assessment preferences and approaches to learning: can formative assessment make a difference? *Educational Studies, 32*(4): 399-409.

Gillham, B. (2000). *Case Study Research Methods.* London/ New York: Continuum.

Handley, K. and Williams, L. (2009). From copying to learning: using exemplars to engage students with assessment criteria and feedback. *Assessment & Evaluation in Higher Education*, First published on: 02 October 2009 (iFirst)

Harvey & Green, (1994). Employee Satisfaction Summary, Birmingham, Quality in Higher Education Project. University of Central England.

Hennink, M.; Hutter, I.; and Bailey, A. (2011). Qualitative Research Methods. Los Angeles/London/New Delhi/Singapore/Washington DC: Sage.

Holliday, A. (2002). *Doing and Writing Qualitative Research.* London/ Thousand Oaks/ New Delhi: Sage.

Hounsell. D. (2003). Student feedback, learning and development. In Slowley, M. and Watson, D. (eds). *Higher Education and the Lifecourse.* Maidenhead: Open University Press.

Hounsell, (2007) *Towards more sustainable feedback to students*. in Boud, D. and Falchikov, N. (Eds.) Rethinking Assessment in Higher Education: learning for the longer term. London and New York: Routledge.

Hounsell, D. (2008). *The trouble with feedback: new challenges, emerging strategies* Interchange 2, pp. 1-10 (tla publication) http://www.tla.ed.ac.uk/interchange. (last access date: 05-05-2009).

Hounsell, D. (2010). Evaluating courses and teaching in Fry, H., Ketteridge, S. And Marshall, S. *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice (3rd Edition).* New York and London: Routledge

Hounsell, D., McCune, V., Hounsell, D. and Litjens, J. (2006). The quality of guidance and feedback to students. 3rd Biennial Northumbria/EARLI SIG Assessment Conference, County Durham, 30th August - 1st September 2006, http://www.tla.ed.ac.uk/etl/publications.html.

Hounsell, D. and Hounsell, J.(2007). Teaching-learning environments in contemporary mass higher education. in Entwistle, N., Tomlinson, P. and Dockerell, J.(Ed.) *Student Learning and University Teaching* (Psychological Aspects of Education - Current Trends. British Journal of Educational Psychology) Monograph Series II no. 4, Leicester: British Psychological Society

Hounsell, D., McCulloch, M. and Scott, M. (Ed.) (1996). The ASSHE Inventory: Changing Assessment Practices in Scottish Higher Education. Edinburgh and Sheffield: University of Edinburgh, Napier University Edinburgh and the Universities' and Colleges' Staff Development Agency.

Hounsell, D., McCune, V., and Hounsell, J., (2008). The quality of guidance and feedback to students. *Higher Education Research and Development*. 27 (1), 55-67.

Illeris, K. (2002) The Three Dimensions of Learning: Contemporary Learning Theory in the Tension Field Between the Cognitive, the Emotional and the Social Leicester: NIACE.

Janssen, J., Kirschner, F., Erkens, G., Kirschner, P., and Paas, F. (2010). Making the Black Box of Collaborative Learning Transparent: Combining Process-Oriented and Cognitive Load Approaches. *Educational Psychology Review*, 22:139-154.

Johnson, R., Onwuegbuzie, A. and Turner, L. (2007). "Toward a definition of mixed methods research", *Journal of Mixed Methods Research*, 1(2):112-133.

Jordan, S. (1999) Self-assessment and peer assessment, in Brown, S. and Glasner, A. (eds) *Assessment Matters in Higher Education*, Buckingham: Society for Research into Higher Education and Open University Press.

Kidder, L. & Judd, C. M. (1986). Research Methods in Social Relation (5th ed). New York: CBS Publishing.

Kvale, S. (1996). Interviews: An Introduction to Qualitative Research Interviewing. London: Sage Publications.

Lapham, A. C., & Webster, W. R. (1999). Peer assessment of undergraduate seminar presentations. In Brown, S. and Glasner, A. (Eds.), *Assessment Matters in Higher Education: choosing and using diverse approaches*. Buckingham: SRHE & Open University Press.

Lennon, S. (1995) Correlations between tutor, peer and self assessments of second year physiotherapy students in movement studies. in *Enhancing Student Learning Through Peer Tutoring in Higher Education*, Jordanstown: University of Ulster, Educational Development Unit.

Liamputtong, P. and Ezzy, D. (2005). Qualitative research methods *(*2nd edn), Oxford
University Press, South Melbourne.

Liu, N. and Careless, D. (2006). Peer feedback: the learning element of peer assessment. *Teaching in Higher Education,*11(3), 279-290.

May, T.(1997). *Social Research: Issues, Methods and Process. (2nd* edn) Buckingham: Open University Press.

May, T. (2001). *Social Research: Issues, Methods and Process.* (3rd edn) Buckingham: Open University Press.

Mentkowski, M. (2006). Accessible and adaptable elements of Alverno student assessment-as-learning. in Bryan, C. and Clegg, K. (ed.) Innovative Assessment in Higher Education. London and New York: Routledge.

Merriam, S. (1998). Qualitative Research and Case Study Applications in Education. San Francisco: Jossey-bass.

McCune, Velda. (2004). Development of first-year students' conceptions of essay writing. *Higher Education,* 47(3): 257-282.

McCune, V., Hounsell, D. and Nisbet, J (2003). Final-Year Biology Courses as Teaching-Learning Environments. In European Association for Research on Learning and Instruction (EARLI) conference, Padova, 26-30 August 2003.

McDonald, B. & Boud, D. (2003). The impact of self-assessment on achievement: the effects of self-assessment training on performance in external examinations, *Assessment in Education*,10(2), 209–220.

Merriam, S.B. (1998). Qualitative Research and Case Study Applications in Education: Revised and expanded from case study research in education. San Francisco, CA: Jossey-Bass

Miles, M., & Huberman, A. (1994). *An expanded Sourcebook: Qualitative Data Analysis*. Thousand Oaks/ London/ New Delhi: Sage.

Miller, C. and parlett, M. (1974). Up to the mark: a study of the examination game. Guidford: Society for Research into Higher Education. London and New York: Routledge.

Newble, D.I. and Jaeger, K. (1983). The effect of assessment and examinations on the learning of medical students, *Medical Education*, 13: 263–268.

Nicol, D. (1997). Research on learning and higher education teaching, UCoSDA Briefing Paper 45 (Sheffield, Universities and Colleges Staff Development Agency).

Nicol, D. (2006). Increasing success in first year courses: assessment re-design, self-regulation and learning technologies. Paper to be presented at ASCILITE Conference, Sydney, Dec 3-6, 2006.

Nicol, D. (2007). E-assessment by design: using multiple-choice tests to good effect. *Journal of Further and Higher Education*, 31(1), pp. 53–64

Nicol, D. (2009). Transforming assessment and feedback: enhancing integration and empowerment. Published by The Quality Assurance Agency for Higher Education.

Nicol, D., (2010). From monologue to dialogue: improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, 35(5), 501-517

Nicol, D. and Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice, *Studies in Higher Education*, 31:2, 199-218.

Nieweg M. R. (2004). Case study: Innovative assessment and curriculum redesign. *Assessment and Evaluation in Higher Education*, 29(2):203–214.

National Student Survey, HEFCE, http://www.hefce.ac.uk/learning/nss/ (last access date: 17-01-2012)

O'Donovan, B., Price, M. & Rust, C. (2008). Developing student understanding of assessment standards: a nested hierarchy of approaches. *Teaching in Higher Education*, 13(2):205-217.

OECD Annual Report (2005). http://www.oecd.org/dataoecd/34/6/34711139.pdf (last access date: 20-08-2011)

Oliver, D., Serovich, J. M., & Mason, T. L. (2005). Constraints and opportunities with interview transcription: Towards reflective practice in HIV/AIDS intervention research. *Social Forces*, 84 (2), 1273-1289.

Orrell, J. (2006). Feedback on learning achievement: rhetoric and reality. *Teaching in Higher Education.* 11(4):441-456.

Orsmond, P., Merry, S,. Reiling, K. (1996). The importance of marking criteria in the use of peer assessment. *Assessment & Evaluation in Higher Education*, 21(3): 239-250.

Orsmond, P., Merry, S. & Reiling, K. (2000). The useof student derived marking criteria in peer and self-assessment'. *Assessment & Evaluation in Higher Education*, 25(1): 23-38

Pallant, J. (2005). SPSS Survival Manual: A step by step guide to data analysis using SPSS for Windows (Version 12) (2nd edn). Berkshire: Open University Press

Patton, M. (1990). Qualitative Evaluation and Research Methods (2nd ed.). Newbury Park, CA: Sage Publications.

Patton, M. (2002). Qualitative Research and Evaluation Methods, Sage, Thousand Oakes, California.

Pieterse, V. and Thompson, L. (2010). Academic alignment to reduce the presence of 'social loafers' and 'diligent isolates' in student teams. *Teaching in Higher Education*, 15(4): 535-367.

Poon, Wai-Yin; McNaught, Carmel; Lam, Paul; Kwan, H. S. (2009), "Improving assessment methods in university science education with negotiated self- and peer-assessment". *Assessment in Education: Principles, Policy and Practice*, 16 (3): 331-346(16).

Poulos, A., & Mahoney, M. J. (2007). Effectiveness of feedback: the students' perspective. *Assessment and Evaluation in Higher Education, 33(2)*, 143-154.

Price, M. and O'Donovan, B. (2006). Improving performance through enhancing student understanding of criteria and feedback in Bryan, C. and Clegg, K. (ed.) *Innovative Assessment in Higher Education*. London and New York: Routledge.

Price, M., O'Donovan, B & Rust, C. (2007). Putting a social-constructivist assessment process model into practice: building the feedback loop into the assessment process through peer-feedback. *Innovations in Education and Teaching International*, 44(2):143-152.

Price, M., Handley, K. and den Outer, B. (2012). Learning to mark: exemplars, dialogue and participation in assessment communities. Presented at European Association for Research on Learning and Instruction, Brussels, 28-31 August 2012

Ramsden, P. (1979). Student learning and perceptions of the academic environment. *Higher Education*, 8 (3):411 – 427.

Richards, L. (2005). Handling Qualitative Data: A Practical Guide. London: Sage Publications.

Richardson, J. (2000). Researching Student Learning: Approaches to Studying in Campus-based and Distance Education. Buckingham: The Society for Research into Higher Education & Open University Press.

Robson, C. (2002). *Real World Research.* Malden MA/ Oxford/ Victoria: Blackwell Publishing.

Rowntree, D. (1987).Assessing Students: How Shall we Know Them? (2nd edn). London: Kogan Page.

Rust, C., O'Donovan, B. and Price, M. (2003). Improving students' learning by developing their understanding of assessment criteria and processes. *Assessment and Evaluation in Higher Education,* 28(2):147–164.

Rust, C., O'Donovan, B. and Price, M. (2005). A social constructivist assessment process model: how the research literature shows us this could be best practice. *Assessment and Evaluation in Higher Education, 30(3)*: 231-240.

Saljo, R. (1979a). Learning about Learning, *Higher Education,* 8:443-451.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems, *Instructional Science,* 18, pp. 145–165.

Sadler, D.R. (1998). Formative assessment: Revisiting the territory. *Assessment in Education* 5(1): 77-84.

Sadler, D.R. (2008). Formative assessment and the design of instructional systems. Republished in W. Harlen (Ed). *Student assessment and testing.* Ch. 14, Vol. 2, 3 28. London: SAGE. (Original publication: *Instructional Science,* 1989, 18, 119 144.)

Scouller, K.M. (1998) The influence of assessment method on student's learning approaches: multiple choice question examination versus assignment essay, *Higher Education*, 35: 453-472.

Sambell, K., McDowell, L. and Montgomery, C. (2012). Assessment for learning in higher education. Abingdon: Routledge

Sambell,K.; McDowell,L.; and Sambell, A. (2006). Supporting diverse students: Develooping learner autonomy via assessment in Bryan, C. and Clegg, K. (ed.) Innovative Assessment in Higher Education. London and New York: Routledge.

Seale, C. (1999). The Quality of Qualitative Research. Lodon/ Thousand Oaks/ New Delhi: Sage.

Serafini (2000).Three paradigms of assessment: measurement, procedure, and enquiry. *The Reading Teacher,* 54(4): 384-393.

Silverman, D. (2000). Doing Qualitative Research: A Practical Handbook. (1st edn.)Thousand Oaks, CA: Sage.

Silverman, D. (2001). Interpreting Qualitative Data: Methods for Analysing Text, Talk and Interaction. 2nd edn, London: Sage.

Silverman, D. (2005). Doing Qualitative Research--- A Practical Handbook. (2nd edn), London:Sage.

Silverman, D. (ed.) (2004). *Qualitative Research: Theory, Method and Practice*. 2nd edn, London:Sage.

Sivan, A. (2000). The implementation of peer assessment: An action research approach. *Assessment in Education*, 7, 193-213.

Snyder, B.R. (1971). The hidden curriculum. Cambridge, MA: MIT Press

Stake, R. (2000). Case studies. In N. Denzin & E. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 435-454). Thousand Oaks, CA: Sage.

Tan, K. (2004). Does student self-assessment empower or discipline students? *Assessment and Evaluation in Higher Education*, 29 (6): 651-662

Tan, K., (2007). Conceptions of self-assessment: What is needed for for long-term learning? In Boud, D. and Falchikov, N. (Eds.) *Rethinking Assessment in Higher Education: learning for the longer term.* London and New York: Routledge.

Tan, K., (2008). Qualitatively different ways of experiencing student self-assessment. *Higher Education Research and Development*, 27(1): 15-19.

Taras, M. (1999). Student self-assessment as a means of promoting student autonomy and independence. In Taras, M. (Ed) *Innovations in learning and teaching: teaching fellowships at the University of Sunderland*, Sunderland: University of Sunderland Press.

Taras, M. (2001). The use of tutor feedback and student self-assessment in summative assessment tasks; towards transparency for students and tutors, *Assessment and Evaluation in Higher Education*, 26(6), 605–614.

Taras, M. (2002). Using Assessment for Learning and Learning From Assessment, *Assessment and Evaluation in Higher Education*, 27(6): 501-510

Taras, M. (2005). Assessment: summative and formative – some theoretical reflections. *British Journal of Educational Studies*, 53 (4): 466-478.

Tashakkori, A. and Teddlie, C. (1998). Mixed Methodology: Combining Qualitative and Quantitative Approaches. Thousand Oaks, CA: Sage.

Teddlie, C., & Tashakkori, A. (2009). *Foundations of Mixed Methods Research.* Los Angeles/ London/ New Delhi/ Singapore/ Wahington DC: Sage.

Thomas, G. (2011). How to Do Your Case Study: A Guide for Students and Researchers. Los An `geles/ London/ New Delhi/ Singapore/ Washington DC: Sage.

Topping, K. (1998). Peer Assessment Between Students in Colleges and Universities, *Review of Educational Research*, 68(3): 249-276.

Van Den Berg, I., Admiraal, W. and Pilot, A. (2006). Peer Assessment in University Teaching: Evaluating Seven Course Designs. *Assessment & Evaluation in Higher Education*, 31 (1): 19-36

Van de Watering, G., Gijbels, D., Dochy, F., and Van der Rijt, J. (2008). Students' assessment preferences, perceptions of assessment and their relationship to study results. *Higher Education*, 56(6): 645-658.

Varlander, S (2008). The role of students' emotions in formal feedback situations. *Teaching in Higher Education*, 13 (2):145-156

Watkins, D. (2001). Correlates of approaches to learning : A cross-cultural meta-analysis. In R. Sternberg & L. F Zhang (Eds.), *Perspectives on thinking, learning, and cognitive style*. Mahwah: NJL Lawrence Erlbaum

Watkins, D., Dahlin, B. and Ekholm, M. (2005). Awareness of the backwash effect of assessment: A phenomenographic study of the views of Hong Kong and Swedish lecturers, *Instructional Science*, 33 (4): 283-309.

Williams, M. (2003). Making Sense of Social Research. London: SAGE.

Willis, D. (1993). Academic involvement at university. *Higher Education*, 25: 133-150.

Xu, R. (2004). Chinese Mainland Students' Experiences of Teaching and Learning at a Chinese University: Some Emerging Findings. Paper presented at the BERA 2004 Conference, UMIST, Manchester, 15-18 September 2004.

Yin, R., (1994). Case study research: Design and methods (2nd ed.). Beverly Hills, CA: Sage Publishing.

Hello everyone,

My name is Chunming Tai, from University of Edinburgh. As a university student my self, I have experience at first hand of being assessed in various ways, getting anxious before exams, having difficulties with writing, and trying to meet coursework deadlines. That has inspired me to focus my PhD research on **students' experiences of assessment**. I particularly want to foreground the **student's voice in assessment**. I also want to explore how assessment in universities can be improved.

I am interested in your experience of assessment on the Module **A.** I will distribute a questionnaire in the class on Thursday (9th of Dec.). This questionnaire focuses on your learning experiences of currently teaching and assessment practice on **this particular module**. Please give your immediate reaction to every comment, indicating how you really do study. If you have not yet encountered a particular situation, try to imagine how you would react. All of your responses will be fully confidential. Data obtained will be strictly remained as anonymous, and only for this research purpose.

If you want to have some say about your experiences, please fill this questionnaire. **If you want to make a friend or just find a good listener to share your experiences,** please contact with me any time. You can reach me by email to s0455280@education.ed.ac.uk or you may call me on

0131 6516695 (office No.) or 07814698995 (mobile).

Do you want to know what your questionnaire says about your approach to learning?

As a gesture of appreciation, you will receive Ten pounds in cash for the participation!

If so, please fill in this survey to sign up for an interview chat!

Then, I will arrange a convenient time for us to have a chat!

Would you like to have your say about the assessment tasks you are currently coping with?

Would you like a chance to suggest how assessment on modules or courses like this might be

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Experiences of Teaching, Learning and Assessment Questionnaire

In this Module**:A**, please give your immediate reaction to every comment, indicating how you really do study. If you have not yet encountered a particular situation, try to imagine how you would react.

1. Approaches to learning and studying

This part of the questionnaire has been designed to allow you to describe, in a systematic way, how you go about learning and studying in **this particular module**.

Please mark in the appropriate box to indicate how strongly you agree/disagree with each of the following statements.

4 =Agree strongly 4?=Agree somewhat ??=Medium/in the middle 5?=Disagree somewhat 5=Disagree strongly

		4	*4?*	*??*	*5?*	*5*
1	When I've been preparing for coursework,I've focused on understanding the material so that I won't forget it.	☐	☐	☐	☐	☐
2	I've been over the work I've been done to check my reasoning and see that it makes sense.	☐	☐	☐	☐	☐
3	I have usually set out to understand for myself the meaning of what we had to learn.	☐	☐	☐	☐	☐
4	In order to keep my work well focused, I've thought about what I want to get out of this module.	☐	☐	☐	☐	☐
5	Much of what I've learned in this course seems no more than unrelated bits and pieces in my mind.	☐	☐	☐	☐	☐
6	In making sense of new ideas, I have often related them to practical or real life contexts.	☐	☐	☐	☐	☐
7	On the whole, I've been quite systematic and organised in my studying.	☐	☐	☐	☐	☐
8	Whenever possible, I've just memorised what has been taught without trying to understand it.	☐	☐	☐	☐	☐
9	I've looked at evidence carefully to reach my own conclusions about what I'm studying.	☐	☐	☐	☐	☐
10	When I've been communicating ideas, I've thought over how well I've got my points across.	☐	☐	☐	☐	☐
11	I've organized my study time carefully to make the best use of it.	☐	☐	☐	☐	☐
12	It has been important for me to follow the argument, or to see the reasons behind things.	☐	☐	☐	☐	☐
13	Whether I've understood has mattered less than getting what we're studying firmly fixed in my memory.	☐	☐	☐	☐	☐
14	I've tried to find better ways of tracking down relevant information in this subject.	☐	☐	☐	☐	☐
15	Whatever I've worked on, I've generally pushed myself to make a good job of it.	☐	☐	☐	☐	☐
16	In reading for this course unit, I've tried to find out for myself exactly what the author means.	☐	☐	☐	☐	☐
17	I don't think through topics for myself, I just rely on what we're taught.	☐	☐	☐	☐	☐
18	If I've not understood things well enough when studying, I've tried a different approach.	☐	☐	☐	☐	☐
19	When I find something boring, I can usually force myself to keep focused.	☐	☐	☐	☐	☐
20	I found I could generally work comfortably with the other students on this Module.	☐	☐	☐	☐	☐
21	Before I could understand a new topic, I've often had to commit key terms and details to memory.	☐	☐	☐	☐	☐
22	This module has encouraged me to give more consideration to the quality of my work.	☐	☐	☐	☐	☐

2. Experiences of teaching, learning and assessment environment

We would like to know about your experiences of teaching, learning and assessment on **this particular module**. *Please mark in the appropriate box to indicate how strongly you agree/disagree with each of the following statements. Please note that you can choose **N/A** if there is some statement not applicable to your context.*

4 =Agree strongly 4?=Agree somewhat ??=Medium/in the middle
*5?=Disagree somewhat 5=Disagree strongly **N/A=Not applicable***

PLEASE TURN OVER

Appendix A

	Organisation and structure	4	4?	??	5?	5	N/A
1	It was clear to me what I was supposed to learn on this Module.	☐	☐	☐	☐	☐	☐
2	The topics seemed to follow each other in a way that made sense to me.	☐	☐	☐	☐	☐	☐
3	How this Module was taught fitted in well with what were supposed to learn.	☐	☐	☐	☐	☐	☐
4	I could see how the set work fitted in with what we were supposed to learn.	☐	☐	☐	☐	☐	☐
5	The handouts and other materials we were given helped me to understand this module unit.	☐	☐	☐	☐	☐	☐
6	The different types of teaching (lectures, tutorials, seminars, etc.) supported each other well.	☐	☐	☐	☐	☐	☐
	Teaching and learning						
7	Plenty of examples and illustrations were given to help us to grasp things better.	☐	☐	☐	☐	☐	☐
8	On this Module, I was prompted to think about how well I was learning and how I might improve.	☐	☐	☐	☐	☐	☐
9	This Module encouraged me to relate what I learned to issues in the wider world.	☐	☐	☐	☐	☐	☐
10	We were encouraged to look for links between this Module and other Modules.	☐	☐	☐	☐	☐	☐
11	The teaching on this Module helped me to think about the evidence underpinning different views.	☐	☐	☐	☐	☐	☐
	Learning support						
12	Staff has tried to share their enthusiasm about the subject with us.	☐	☐	☐	☐	☐	☐
13	Staff has been patient in explaining things which seemed difficult to grasp.	☐	☐	☐	☐	☐	☐
14	Students' views have been valued on this Module unit.	☐	☐	☐	☐	☐	☐
15	Students supported each other and tried to give help when it was needed.	☐	☐	☐	☐	☐	☐
16	Talking with other students has helped me to develop my understanding.	☐	☐	☐	☐	☐	☐
	Choice						
17	We were allowed some choice over what aspects of the subject to concentrate on.	☐	☐	☐	☐	☐	☐
18	This Module provided plenty of opportunities for me to discuss important ideas.	☐	☐	☐	☐	☐	☐
19	In this Module, there has been time for me to explore in more depth aspects which particularly interested me.	☐	☐	☐	☐	☐	☐
	Assessment and Feedback	4	4?	??	5?	5	N/A
20	You have really to understand the subject to get good marks in this Module.	☐	☐	☐	☐	☐	☐
21	Doing the course work has helped me to make connections between existing knowledge and my experience.	☐	☐	☐	☐	☐	☐
22	To do well in this Module, you had to think critically about the topics.	☐	☐	☐	☐	☐	☐
23	I expect the mark I get will be a good reflection of how well I understand the course material.	☐	☐	☐	☐	☐	☐
24	It was clear to me what was expected in the assessed work for this Module.	☐	☐	☐	☐	☐	☐
25	I received detailed comments on my work.	☐	☐	☐	☐	☐	☐
26	The feedback was given quickly enough to be useful.	☐	☐	☐	☐	☐	☐
27	The teacher's feedback on my work has helped to clarify things I hadn't fully understood.	☐	☐	☐	☐	☐	☐
28	The feedback given on my work from my fellow students has helped me to improve my ways of learning and studying.	☐	☐	☐	☐	☐	☐
29	I usually understand the feedback comments being given on this Module.	☐	☐	☐	☐	☐	☐
30	It's as important for me to pay attention to the comments as to the grade.	☐	☐	☐	☐	☐	☐
31	I paid careful attention to any advice or feedback I was given, and tried to improve my understanding.	☐	☐	☐	☐	☐	☐
32	If I were puzzled by the feedback given, I would ask for help.	☐	☐	☐	☐	☐	☐
	Involvement in assessment						
33	We have had opportunities to practice the kinds of problems on which we will be formally assessed.	☐	☐	☐	☐	☐	☐
34	Marking on other's work really helped me to understand what good work for this Module looks like.	☐	☐	☐	☐	☐	☐
35	Giving feedback to others really helped me understand the course material better.	☐	☐	☐	☐	☐	☐
36	Being assessed on a project I've designed has made me feel more committed to my studies.	☐	☐	☐	☐	☐	☐
37	I believe that the students can take some responsibility for deciding what makes for high quality work.	☐	☐	☐	☐	☐	☐
38	In my view, students have a valuable role to play in the marking process.	☐	☐	☐	☐	☐	☐

3. Satisfaction

Finally, we would like to know how much you fell you have gained from **studying this Module**.

4 =Very much/extensively 4?=quite a lot ??=some 5?=not too much/a little 5=Not at all

		4	*4?*	*??*	*5?*	*5*
1	Liked the idea of being involved in the marking and feedback giving process.	☐	☐	☐	☐	☐
2	Enjoyed with the way the Module has been taught.	☐	☐	☐	☐	☐
3	Satisfied with the way I've been assessed on this Module.	☐	☐	☐	☐	☐
4	Acquired knowledge and subject-based skills.	☐	☐	☐	☐	☐
5	Obtained the ability to think critically and make judgment about others' work.	☐	☐	☐	☐	☐
6	Gained interpersonal skills to work and communicate with other students.	☐	☐	☐	☐	☐
7	Managed to be organising and being responsible for my own learning.	☐	☐	☐	☐	☐
8	Acquired other transferable skills such as IT skills, research skills, presentation techniques, etc.	☐	☐	☐	☐	☐
9	Other gains (pls. specify): ……	☐	☐	☐	☐	☐

4. Would you like to fill in some background information below for research purposes only? *Please mark in the appropriate box or provide related information.*

● Gender:	Female		Male					
● Age:	16----20		21----25		26+			
● Level of Study:	Year 1		Year 2		Year 3		Year 4	
● Year of Entry:	Year 1		Year 2		Year 3		Year 4	
● Have at least one of your parents or guardians completed a university degree?					No		Yes	
● If you are willing to participate in a **short** interview chat later, could you provide your contact information (***£10*** *in cash will be provided as a gesture of deep appreciation from me for your participation*)?	Phone: Email (please write in **Block Capitals** clearly):							
● Month prefer: Apr. ( ), May.( ), June ( )	Time prefer: AM ( ) PM ( )							
● Day prefer: Mon.( ), Tue.( ), Wed.( ), Thu.( ), Fri.( ), Sat.( ), Sun.( )								

Thank you AND Good luck to your study!!!

Please sign up for an interview!